

SEP 1893 P.A.I



Official Journal of the National Brotherhood Electrical Workers of America.

VOL. 2.—No. 3.

ST. LOUIS, SEPTEMBER, 1893.

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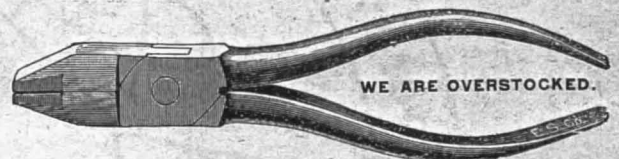
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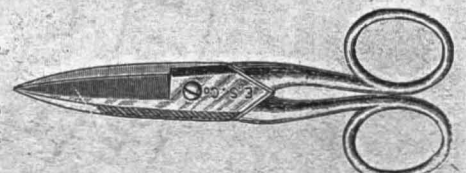


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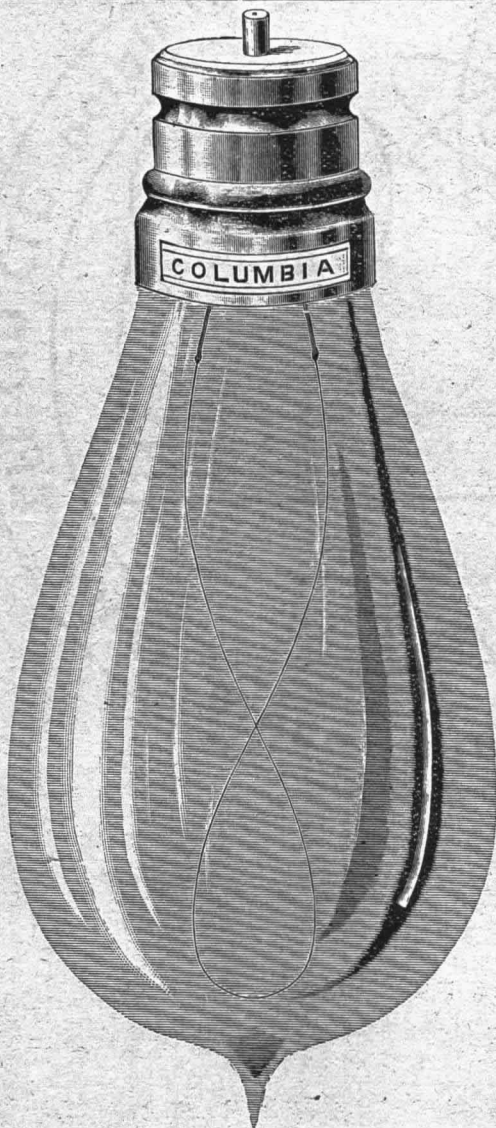
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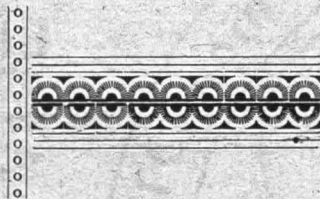
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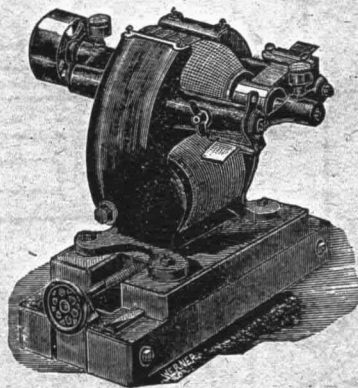
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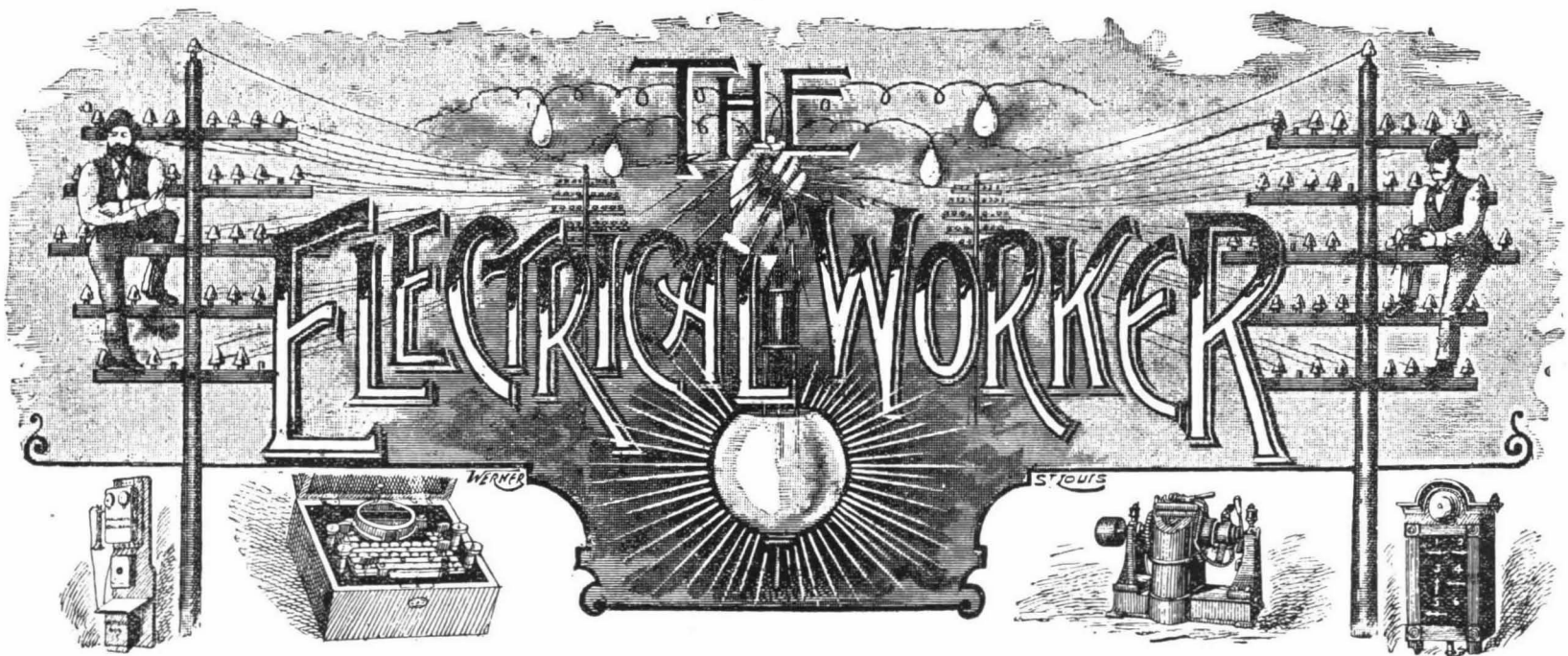
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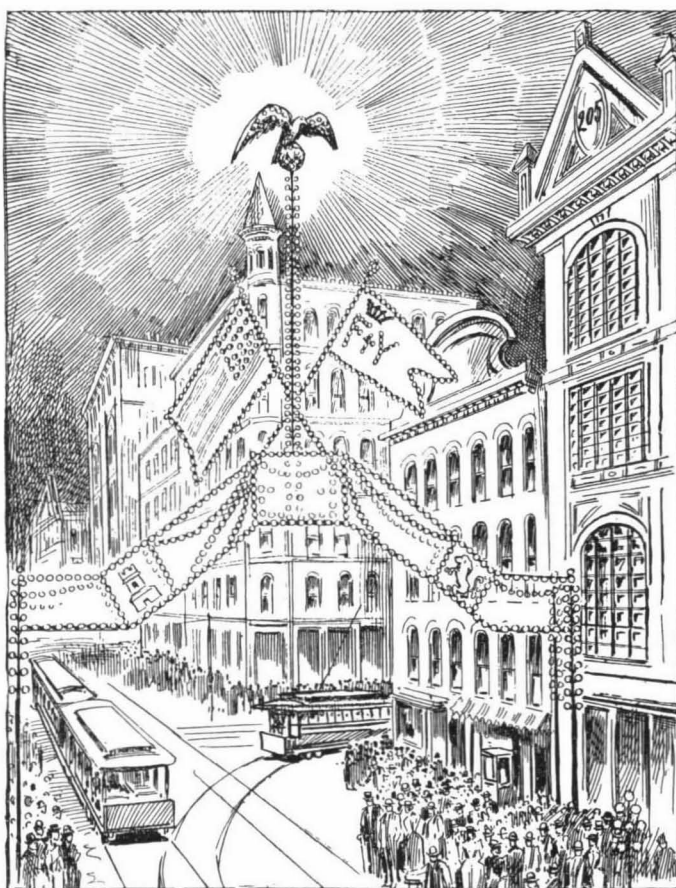


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PER YEAR, \$1.00 IN ADVANCE.
SINGLE COPIES, 10 CENTS.



STREET ILLUMINATION IN ST. LOUIS DURING THE FALL FESTIVITIES.

Illustrations are given of two electrical arches on Broadway, forming a section of the extensive illumination plan in St. Louis this year. One of these is a floral arch at the junction of Broadway and Washington avenue. It is a singularly effective piece of work and is made up of floral pieces in natural colors. In the body work of the arch there are several flowers with incandescent lights defining the outlines, while the curve is surmounted by other flowers several feet higher. The colors are well worked out and form a very pleasing contrast

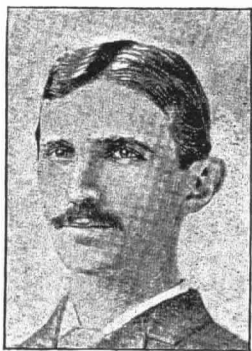
to the other decorations and surrounding buildings. The arch can be seen from a great distance and is watched by numbers of spectators every evening.

Illustration is also given of the arch on Broadway, to which has been given the name of "Under two flags." This arch is made up of the flags of the United States and Spain, with an eagle rampant. Electricity is used exclusively to produce the effect, but by a very ingenious device, whereby sections of the lights are turned on and off rapidly, an appearance of waving is produced and the eye is very

readily deceived. The eagle aloft is a mass of electric lights, and there are all around decorations of more or less symbolic character. This is a very costly arch and is necessarily a very strong one on account of its great wind resistance.

The special illumination nights arranged for the remainder of the carnival, are September 21, 28, 30, and October 3, 5, 12 and 19. For these dates special low rates are granted by the railroads, in addition to the concessions which are enforced during the entire carnival.

NIKOLA TESLA.



IF NIKOLA TESLA, the electrician, should be sentenced to death in the State of New York—an event not likely to occur, as he is an exceptionally mild-mannered man—an interesting legal complication might arise in the attempt to carry out the sentence. In the State of New York a man can be legally killed by an electric shock.

There are grave doubts as to whether an electric shock, no matter how powerful it might be, would kill Mr. Tesla. Contact with an extraordinarily powerful current of electricity would certainly not kill him if he were permitted to construct the apparatus supplying it. An electric flow of 2,000 volts sufficed to kill Kemmler, the first victim of electrocution at Sing Sing. But 2,000 volts of electricity would have no damaging effect on Mr. Tesla, provided, of course, the power came from a machine of his own preparation. If, then, he should be sentenced to die and an apparatus prepared by himself was the only machine to be obtained for carrying the sentence into effect, the law's mandate could not be enforced and a problem would be presented for the lawyers to fight over. It would seem that if the prisoner could not be killed with electricity he could not be legally put to death in any other way, and he would therefore be entitled to his discharge.

Nikola Tesla is the man about whom the electricians have been constantly talking since he went before an audience less than a year ago and, in order to demonstrate the harmless character of the electric fluid when properly regulated, deliberately put himself into contact with a current having a strength of 250,000 volts. The spectators expected to see him burned to a crisp, his muscles paralyzed or his bones ground to atoms. But none of these things happened. Mr. Tesla came out of the contact sound and well. He had not even been rudely shocked, so far as appearances went. Before he made the experiment excited men in the audience tried to restrain him.

"Don't let him do it!" they shouted to his assistants on the stage. "The contact will kill him."

But Tesla knew what he was doing. He waved aside the attempted interference, and stepping calmly in front of the machine, he let the tremendous force of 250,000 volts pass into and through his body. Then he dropped the handles and turned to his auditors, who were filled with amazement that a man could pass through such an ordeal and live. The ignorant ones said it was a trick, and that the electric current had not touched the man's body; but Tesla insists that it was a genuine performance, and he makes an explanation of the feat which satisfies the people of scientific minds that there was no trickery in it. It is a wonderful exhibition, of course, but it is well to remember that this is an age of wonders.

Tesla has repeated his remarkable performance several times since he startled the electrical world with his first exhibition, and always with the same satisfactory results. He will perform this feat in the Electricity Building at the World's Fair some time during the present month.

On September 2nd he gave an exhibition at the Electricity Building showing his progress with the new apparatus. In a dark room with an apparatus supplying alternating electric currents of 800,000 voltage he was able to cause atmospheric vibrations which produced a light equal to mid-dawn.

Explaining this demonstration Mr. Tesla said: "With these alternating currents of 800,000 voltage I cause the air particles to vibrate 400,000 times a second. Now if I can increase the atmospheric vibrations, say one million or ten thousand million times, I can produce sun light in this room. Of course I can increase the vibrations by increasing the voltage, and there is no trouble about increasing the voltage. I can make the voltage 8,000,000 as easily as 800,000. But I am not yet ready to handle 8,000,000 volts of electricity. Currents of such strength would kill everybody in the room. I expect, however, to learn how to control a larger voltage. When I have increased the atmospheric vibrations, perhaps a thousand times, the phenomenon will no longer be electricity. It will be light. I regard the words light, heat and electricity as being interchangeable terms. Sunlight is a more remarkable phenomenon than electricity. Sunlight does not harm anyone, unless he is exposed for a long time to a fierce glare. A man can stand for a brief interval without harm near a red-hot stove. I am satisfied that sunlight can be made

from electricity without doing harm to anybody and I expect to discover how it is done."

It is the opinion of Mr. Tesla that, great as have been the advances in electrical science in recent years, we are still just upon the threshold of the chamber containing this mysterious agent.

"We are going to use electricity for almost everything," he said. "We are going to know all about it and, above all, we are going to know how to control it. Even now it is the safest motive power we employ. If the steam boiler in a large factory bursts it is likely to kill a score—perhaps a hundred—people. A horse running away with a carriage full of people may kill all of them. Electricity rarely kills more than one man at a time. A 'live wire' in this room might kill one man, but hardly two men. Electricity is like a rattlesnake. It strikes its victims one at a time. But it will not long be possible for it to kill anybody. We are going to harness it and make it absolutely safe. As a motive power it will be safer than engines or horses, because it will never get out of harness. Just as soon as we learn how to harness it so as to secure perfect safety—and I think that time is not far distant—electricity will take the place of fire and steam, and will be the only agent employed to light and heat and move the entire world.

When I stand before an audience and receive into my body a charge of electricity of 250,000 voltage power I do it to show how harmless this agent can be made with proper handling. I am enabled to accomplish this feat by the use of alternating currents, and any able-bodied man, not unusually sensitive to electric force, can perform the same feat, if he will use the same machine that I do. I have simply learned how to put the harness on that amount of electricity. But 2,000 volts from any other machine would kill me as quickly as it killed Kemmler at Sing Sing. I have devoted my life to electrical research and my only ambition is to discover how this wonderful power may be harnessed and made to do the work of man safe and satisfactorily."

An Electric Locomotive.

It is to America, the home of so much inventive genius, that the honor of constructing the first practical and commercial electric locomotive must be awarded.

This electric locomotive, constructed in the Lynn shops of the General Electric Company, will go out to Chicago in tow of a regular train. It is built to the standard steam railroad gauge. Its dimensions are somewhat similar to those of the steam motors now in use on our elevated lines, i. e., sixteen and a half feet long, eleven and a half feet high, and eight feet four inches wide. The motors are supported on springs resting upon the frame of the machine, and the armatures are mounted upon hollow shafts through which the axles of the wheels pass, and to which they are connected by special couplings. The cab is of sheet iron and is built upon the frame of the locomotive directly over the moving parts. It is symmetrical in appearance, and it is so curved as to offer receding surfaces to the atmospheric pressure. The windows allow of unobstructed view in all directions. The interior of the cab is finished in hard wood, and is lighted by a cluster of incandescent lamps. Inside this cab are the electric air compressors, for operating the air brakes and the whistle, and the controlling switch. Above the frame of the cab at each end are placed the electric headlights.

The electricity will be taken up by the motors according to prevailing conditions. The trolley may be, under certain circumstances, the method adopted, while under others the current will be taken from conductors running parallel with the service rail by means of a running wheel or a sliding shoe contact, as in the case of the intramural railway at the Fair, or the overhead railway at Liverpool. This locomotive is designed to attain a normal speed of thirty miles an hour, and was primarily intended for elevated work and for passengers and light freight traffic on less important steam roads.

The construction of this locomotive is the logical consequence of the adaptation of the electric motor to street transit. If electricity could successfully be applied to the propulsion of street cars and small factory tramways, could it not equally well be applied to the traction of freight and passengers on the steam roads? The steam locomotive, with all its shortcomings, its noise and racket, its smoke and flying dust and cinders, and its ear-splitting steam escape, was not the ultimate expression of man's desire. Feeling this, inventive genius has put forth this electric locomotive as the first practical step towards the adoption of electricity altogether, as a means of securing absolute rapid transit. Its completion marks a very decisive advance in the development of electricity. The electric locomotive is susceptible of a higher speed even than that already attained by our most magnificent steam locomotives, for whereas there is always a limit to steam production and utilization, dependent upon the structural and operating conditions

of the locomotive, the limit of speed of a revolving armature is as yet unknown.

The adoption of the electric locomotive will, of course, be gradual. The capital already invested in trunk railroads will not permit of a sudden discarding of the costly steam engines and their replacement by electric locomotives, and all the improvements which the introduction of electricity would entail. At present the use of electric locomotives over long distances is limited only by the cost of long lines of feeder wires to carry the electricity to suitable feeding points, and until this problem is solved restriction of its employment must necessarily exist. But for places comparatively near each other, and where traffic is dense, the denser the better, the electric locomotive is peculiarly adapted, for here all the advantages of electric propulsion are available, unhampered by the extreme expense involved in long feeder lines.

At first it will probably be used in elevated railroad service, and in New York and Brooklyn and Chicago alone, its advent will be hailed with a feeling of deep gratitude. Electric locomotives will then probably be adopted as feeders to the trunk lines, both for freight and passenger traffic; and to operate short suburban lines, where a rapid efficient service is a requisite. Their peculiar fitness for switching purposes will advance their use another step, and then slowly as the different problems presented are overcome, they will invade the province of the trunk line steam locomotive and the millenium of railroad travel will be within the realities of life. Indeed it will not be long before passengers will travel in comfort through the tunnels at Baltimore, behind 100-ton electric locomotives now being constructed.

Electricity and Ether.

It would have been a very interesting phase of the late Electrical Congress if some of the distinguished authorities on the subject of electricity who were present should have given their views on the real nature of that elusive agency. This is just what they persistently refused to do. Their reluctance to define electricity is no reproach to them or their science, on the contrary it is to their credit that they resolutely decline to go beyond the bounds of their actual knowledge.

Men of science have learned a great deal about the phenomena of electricity, but they do not profess to know anything about its nature. They can tell what it will do, but not what it is. Once it was supposed that electricity was a fluid, or else two fluids with opposite properties. Then this hypothesis was discarded along with caloric and electricity was confidently asserted to consist in molecular motion of some sort. This theory also has been discredited of late years, and professors of science are not wanting who assert that electricity is after all a thing and not merely a mode of motion.

Professor Oliver Lodge is the man who has, perhaps, taken the most active part for the past few years in discussing the nature of electricity, and he has gone so far as to lay down the proposition which is to most persons an astonishing one, that electricity is nothing else than the ether. Now, the ether, which is a medium supposed to pervade all space and to serve as a vehicle for the transmission of light and energy, is about as unknown and unknowable an entity as was ever feigned by human imagination, and to say that electricity is ether is merely to define the unknown in terms of the more unknown.

This is no reproach to science, but it is embarrassing to the unscientific inquirer. Experts of this latter day say that the existence of the interstellar ether has been established to a certainty. It is certain that light is not transmitted by the air, and they say it is certain that light is transmitted by undulatory motion of some kind. Such being the case there must be something to move and whatever it is that something is the ether.

The ether, however, can not be matter in the ordinary sense of the word, for any kind of matter capable of transmitting motion with the rapidity of light would have to be more solid than adamant; yet all the celestial spheres have moved for aeons through this supposititious ether without being retarded at all in their revolutions. Ether, therefore, has not the ordinary properties of matter.

This conclusion is only one illustration of the way in which science inevitably runs into the much-despised metaphysics. All men of science agree that all physical phenomena will some time be explained by mechanical laws, yet in the development of these laws they always fall, in the last analysis, into some explanation involving forces or principles that are not material. They say that the ether is within the domain of physics even though it is not material in the ordinary sense. So it will be asserted, if pure metaphysics has to be resorted to, that it also is within the domain of physics. But this is a very different thing from the old boast that all the physical universe could be explained by the laws of matter and motion.

ELECTRICAL TERMS.

Which Should be Familiar to Every
Electrical Worker, From Thos. G.
Grier's Note Book of
Wiring Tables.

The terms which should be familiar to the wireman, and which should convey to him a definite idea, are the ohm, the volt, the ampere, the watt, circular mil, horse power and candle-power.

THE OHM.

The ohm is the unit of electrical resistance. The transmission of electrical energy along any material is accomplished with more or less ease, requires more or less pressure, depending upon the nature of the substances. We speak of these various materials as offering more or less resistance to the flow or transmission of electrical energy. The resistance of each substance can be compared with the resistance of another, and the most accurate method of comparison is to determine upon some standard unit by which all substances can be measured. The standard unit is the resistance of a column of mercury, one square millimeter in cross section and 106 centimeters in length, at a temperature of 32 degrees Fahrenheit. The name given this unit is the ohm. A megohm is 1,000,000 ohms.

AMPERE.

The unit of quantity is called the coulomb. An ampere is the unit rate of flow. An ampere is a current of such strength as would deposit from solution .006084ths grain of copper per second. The flow of water through a pipe of so many gallons per second is the rate of flow; a coulomb per second is an ampere or rate of flow of the electrical current.

In the case of water, to express the rate of flow we must speak of both time and quality; in electrical matters the one word ampere, expresses, the two.

THE VOLT.

The volt is the unit of electrical pressure, electromotive force or difference of potential. To grasp a clear conception of electrical pressure, comparisons are drawn, that is, we speak of so many volts as we speak of steam pressure in pounds to the square inch, or of a head of water in feet. This electrical pressure must have some unit by which it can be measured, and the standard unit (one volt) is such an electromotive force as would cause a current of one ampere to flow against the resistance of one ohm.

OHM'S LAW.

Ohm's law expresses the relation which the three units, the ohm, the ampere and volt, bear to each other.

The current strength is directly proportional to the pressure and inversely proportional to the resistance. The law is expressed by an equation:

$$\text{Current in amperes} = \frac{\text{Electromotive force in volts.}}{\text{Resistance in ohms.}}$$

This equation is generally given by the following symbols:

$$C = \frac{E}{R}$$

C denoting current strength or amperes; E, electromotive force or volts; and R, resistance or ohms.

The following equations are the same law in different forms:

$$E = C \times R \quad R = \frac{E}{C}$$

THE WATT.

The watt is the unit of electric power, the volt-ampere; the power developed when 44.25 foot pounds of work are done per minute or .7375 foot pounds per second.

There are three equations which give the value of the watt:

$$C \times E = \text{Watts} \quad \frac{E^2}{R} = \text{Watts}$$

$$C^2 \times R = \text{Watts.}$$

One kilo-watt is 1,000 watts.

HORSE-POWER.

A horse-power is a mechanical unit and is the work done in raising 550 pounds one foot high in one second or 33,000 pounds one foot high per minute; 746 watts equal one horse-power.

CANDLE POWER.

The candle-power is the unit of light, and a standard candle is a candle of definite composition which, with a given consumption in a given time, will produce a light of a fixed and definite brightness. A candle which burns 120 grains of spermaceti wax per hour, or two grains per minute, will give an illumination equal to one standard candle.

In comparing the capacity of electrical machines in candle-power a great mistake is made, as the electrical generators or dynamos do not produce light, but produce electrical energy, and this energy, in being transformed into light, is subject to the efficiency of the lamps which transforms the one energy into the other, that is, electrical energy into the energy of illumination.

Nominal candle-power is a term sometimes applied to the candle-power taken in a certain favorable direction. This term is generally used in arc lighting. In the ordinary arc lamp the greatest amount of light is emitted at a particular point, namely from the crater in the upper or positive carbon. The term "rated candle-power" is sometimes used for nominal candle-power.

Spherical candle-power is the average or mean value of candle-power taken at a number of points around the source of light.

CIRCULAR MIL.

The circular mil is the area of a circle whose diameter is one thousandth part of an inch.

As the conductors of electricity used in practical work are mainly round wires, and as the sectional area or cross section of these wires, when made of the same material, regulates their capacity for transmitting electricity, we frequently wish to compare these areas. As the areas of all circles vary as the squares of their diameters then, when we obtain these diameters in thousandths of an inch or mils, by squaring these diameters we can always obtain the areas in circular mils.

A rectangular piece of copper, with each side one thousandth of an inch would have an area of one square mil. If the diameter of a square copper bar is one inch, it would have an area of one million square mils (as there are one thousand mils in an inch, and one thousand multiplied by one thousand equals a million). The area of a round copper rod one inch (one thousand mils) in diameter is equal in circular mils to its diameter squared, which is one million. The copper rod is less in area than a square bar of the same diameter, yet the area of the one expressed in square mils is the same in numbers as the area of the other expressed in circular mils. Because of the instructions often given "that the square of a diameter of a wire in mils will give its area," the above illustration of the square copper bar and the round rod is given.

The true meaning of the circular mil is often misunderstood. It is an entirely distinct and independent unit of area, a unit smaller than a square mil, in the same proportion as the area of a circle of a certain diameter is to a square of the same diameter.

It may be convenient to reduce the area of a copper bar, the cross section of which is square, to circular units. To do this, obtain the dimensions of its cross section in thousandth parts of an inch, or mils, and get the area in square mils.

As the area of a square is to the area of a circular as 1 is to .7854, the area in square mils can be reduced to circular mils by dividing the square mils by .7854.

[In the above the explanations and definitions of the various terms may be clear to some, and yet others may find them indefinite. To write that all may understand is difficult. The editors will be glad to have any questions which may be asked by anyone answered in these columns, and continue to do so as long as any reader of this paper may desire. One of the functions of a journal is that of an educator, and we are willing to do our part if our constituency will only ask for what they want. Ed.]

World's Fair Correspondence.

Chicago, World's Fair Grounds, Sept. 1:—The great Columbian exposition is seeing its palmiest days as autumn comes on apace. Cooler weather brings with it the crowds. Especially are these the days for the farmer. His toil in harvesting at an end, he seeks the delights which others have enjoyed before, yet seeks them when at the best. Never was the mammoth show more beautiful. Few evidences of drouth are here: Incessant streams of water have been playing over the grounds during the entire summer. The flowers and foliage are at their best. Then, too, the management has learned well how to accommodate and take care of a crowd. Music is the order of the hour; plenty of music, distributed in the different buildings, instead of confined to the few band stands. Variety, too, is given to the night illuminations. Wooded island is illuminated with ten thousand tapers. These are held in variegated colored glass globes something like a Chinese lantern. The island is surpassingly beautiful when wearing these jewels at night. When the island is illuminated the various kinds of craft swarming on the lagoons are also illuminated with Chinese lanterns, etc. The fire works, too, have new designs. No one can picture the grandeur of this feature. Water and fire rival each other for the honors. One looks at the electric fountain and wonders if anything can be more beautiful, and immediate looking up finds the heavens all aflame with the gorgeous beauties of Paine's fire works, and he hardly knows whether to give the honors to this or that. Best of all, 150,000 people are here to appreciate the glories wrought at so great an expense, and everybody ought to see them.

The coming revolutionizing agent is here—electricity. Everybody acknowledges its right to rule. Somehow it is in the air that steam must take a back seat and electricity drop into the harness and do the world's labor. But there is more than power in this subtle agent. All kinds of possibilities are wrapped up in it. The glory of this exposition is the variety of illumination. There are more electric lights in Jackson Park than in all the great city of Chicago. Five hundred arc lights in the manufacturers' building alone—enough to light a city of 75,000 inhabitants. Incandescent lights are innumerable. Like gold beads, they are used by the yard to decorate everything. Great search lights are throwing their fountains of white light athwart the darkness on every hand. Some of these have three million candle power. The most exquisite effects can be secured by this wonderful agent. These are witnessed in the electric fountains. Spray from forty-two jets is thrown a hundred feet into the air and this, by the electric light, assumes all the glories of the sunset. No pen, no tongue can describe it, nor can artists place it on canvass.

In the scenic theatre these fine effects are best to be seen. This is located in the southeast corner of the electric buildings. No one ought to miss it. You are seated in a room large enough to accommodate a hundred persons. The lights are turned off, when there stretches out before you a scene in the Alps. At the base of the mountains are some houses, in which the lights can be seen through the windows. The daylight is just dying. The operator informs you that it now is eight o'clock in the evening. Darkness overlays the scene, and soon the lights go out in the houses, indicating bed time. Then a solemn darkness reigns. After a time the faint streaks of day are seen, then the gray dawn and then the mountain tops catch the glory of the sun. The most gorgeous sunrise is before you, and now it is broad daylight. After a time the heavens are overcast with clouds, the rain descends and the forked lightning flies hither and thither; the thunder roars and men and women appear with umbrellas hoisted. The rain abates, and in the receding clouds the rainbow stands out, beautiful and clear. And again darkness approaches; the sunset reddens the scene with a glory ineffable; nature can do no better. Once more the lights are lit in the mountain dwellings and you feel like you must go out of the heavy shadows into the cozy abode of the mountaineers, when a button is touched and you are made to suddenly realize the deception, for now the chandelier above you floods the room with light, and you see the faces of a hundred others, and remember how you came to see a few minutes before and got lost in reverie captured by the subtle agent, electricity.

This is the same wonderful something which propels the massive cranes in machinery hall, that lift and carry twenty tons as a child handles toys. A thirty-ton electric engine carried me the other day. Its driver told me it had drawn twenty-two loaded freight cars, and there was now being constructed engines weighing 90 tons. So there we have it—the locomotion of the future.

J. S. BITTER.

PART II.

FRICTIONAL ELECTRICITY.

Electricity of Rubbed Glass—Production of Electricity by Steam Escaping Through Narrow Passages, and the Conducting Power of Certain Substances.

By J. M. BERGER, PRESS SECRETARY, No. 26.

It is well known that the kind of electricity which glass receives by friction depends upon the rubbing substance. I will state that by various means glass may be brought into such a condition that by a slight rubbing it becomes negative with substance which, under ordinary circumstances, make it positive. I have found, by experiment, that if a glass rod be passed several times through the flame of a spirit lamp (whereby traces of adhering electricity are dissipated), and then rubbed gently with cloth, which ordinarily renders it positive, it becomes negative, and it is only after continued and stronger friction that I found positive electricity to appear again. It is not the heat of the glass rod which produces this effect, for if, after having been passed through the flame, the rod is allowed to become perfectly cold, or even laid aside for several days, it still becomes negative by slight friction with cloth. This experiment shows that heat is not the immediate cause of the above-mentioned phenomenon, but it might be possible that the heat of the flame was the cause of the condition of the surface of the glass, by virtue of which it became negative by slight rubbing. (But it has been shown by Heintz that this is not even the case.)

If a perfectly clean glass rod be wrapped in tin foil, or put into a glass tube, and then held in the flame of a spirit lamp, so that the flame does not touch it, but still heat it, the above-mentioned peculiarity does not appear, even if the temperature has been carried to a high degree. In order to give to glass this peculiar property, it is not necessary to hold it within the flame; it is sufficient to pass it back and forth at a distance of about three inches above the top of the flame of a good spirit lamp, with double current of air. Now, to clean the glass rod properly, it should be washed with a solution of caustic potash, and rinsed with distilled water.

If any of the brothers wish to try the experiment, they can use any other flame and get the same results as if they use the alcohol lamp. The chemical action of the products of combustion cannot be the cause of this phenomenon, for steam does not produce it; but the flame of burning hydrogen does, and in this case nothing but the vapor of water is produced. I have tried the experiment of dipping the glass rod into concentrated sulphuric, muriatic or nitric acid, and rinsed after I had removed it with distilled water until the drops no longer showed an acid reaction, the adhering water thrown off, and what still remained I allowed to evaporate. The rod acts precisely in the same way as it would have done if it had been passed through the flame of a spirit lamp, it becomes negative by friction.

Alkalies do not act like the acids; they cause the glass rod to become decidedly positive. I find that there is a great difference between the various specimens of glass in regard to the facility with which they assume the above-described condition. I find, by experimenting upon rock crystal calcspar, gypsum and heavy spar, the flame of a spirit lamp has the same action as upon glass. Now, on the other hand, I have found, by experiment, such substances as ordinarily become negative by friction, could not, by the experiment of similar means, be so changed as to become positive. In relation to the rubbing substance, it is shown by experiments that for cloth, we may substitute leather, sealing wax or silk (but not Kienmaier's amalgam). Now, on the other hand, a glass rod prepared in the flame

of a spirit lamp and rubbed with tin foil, shows negative electricity; the same effect is produced by the other metals, even on dipping a prepared glass rod into mercury. But once it is drawn out with negative electricity, but by repeated dippings, however, I have found it is rendered positive. The conducting power of certain substances is as follows: For instance, we take a small rod of selenium three lines thick, will discharge a gold leaf electrometer almost instantaneously, and by means of it sparks may be drawn from the conductor of an electrical machine; insulated and rubbed in one spot by flannel, it becomes negatively electrified in every part. In its ordinary condition, consequently, the surface of selenium conducts. If, in one spot, a new surface is made by fusion, it does not conduct electricity as well as before, and a thread of selenium drawn out in a flame insulates as well as shellac. Rubbed with flannel, leather, linen or even drawn between the dry fingers, such a thread becomes strongly negative. Selenium, therefore, is a non-conductor, and becomes electric by friction if its surface is perfectly clean.

Now, for a few words on iodine as an imperfect conductor of electricity. A rod of this substance $6\frac{1}{4}$ lines thick and $20\frac{1}{2}$ lines long, I found, by experiment, discharged an electroscope in one second; without insulation, this rod could not be electrified; when insulated and rubbed with flannel, it becomes feebly negative.

Aluminum and glacialum, in the form of powder, when properly dried, I find to be non-conductors.

Retinasphaltum insulates, provided that the pieces have a clear vitreous surface when used.

Leather—brown pieces, with a rough ragged surface, I find, on the other hand, conduct, as is also the case with bits of amber having a rough surface.

I shall now give a short account of my researches on the production of electricity by escaping steam. The apparatus I employed was not intended to produce steam in quantity or of high pressure, my object being to discover the cause of the phenomenon, and not to increase the electric development. My boiler held ten gallons of water, and would allow the evaporation of five gallons. To this boiler I attached a pipe $4\frac{1}{2}$ ft. long and about three-quarters of an inch in diameter, at the end of which was a globe about 4 inches in diameter, that I designated as the steam globe, which I present herewith as Fig. 1. To this I screwed different mouthpieces. The boiler was well insulated. I screwed a mouthpiece of narrow box wood tube to my steam globe. Now the globe contained no water; the issuing steam, after the first moment, and as soon as my apparatus became hot, excited no electricity. But when the globe contained so much water that it passed out with the steam, I found that an abundance of electricity appeared.

But instead of the boxwood tube the apparatus which I represent in Fig. 2 may be used. This consists of a narrow tube, into the upper side of which water may be allowed to enter from the small vessel B, on opening the stopcock C. If the steam globe contains no water, and the cock C is closed, no electricity is obtained when the steam escapes; but as soon as the cock C is opened so that the water can drop into the issue pipe and be carried off with the steam, electricity is instantly developed. Hence it follows that steam alone is not sufficient for the development of electricity; there must be condensed steam, consequently, drops of water to rub upon the sides of the escape pipe, or, in other words, the electricity is due entirely to the friction of the particles of water carried out by the steam. Now, instead of pure water, a very dilute solution

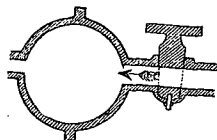


Fig. 1.

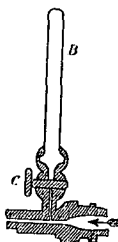


Fig. 2.

of any salt or acid be employed in the apparatus shown in Fig. 2, the development of electricity ceases entirely.

This arises, as Faraday justly remarks, from the conducting power of water being so much increased by these agents that the electricity developed by its rubbing upon metal or any other substance is immediately discharged again. The case is just the same as if we attempt to excite shellac by flannel which is moist instead of dry. As ammonia increases the conducting power of water only in a small degree, I concluded that a solution of ammonia, in the place of pure water, introduced into the escape tube would still permit the development of electricity. My experiments in this line verified my expectation. The following articles, viz., wood, glass, shellac, sulphur, etc., become negative by the friction of the jet of steam and water, while the jet itself is positive.

An ivory tube, used as an issue piece, I find causes scarcely any electrical excitement, so that neither my boiler nor the jet are electrified. But I find that when the neutral jet of steam and water is allowed to impinge upon various substances, electricity is developed. I find by experiment that if threads or strings of different kinds be stretched upon a fork of stout wire and then exposed, when insulated, to the neutral jet, they become excited, as may be shown by the gold leaf electrometer. (In this way Faraday found that linen, cotton, silk, wool, yarn, etc., became negative by friction of the unexcited jet.) I find by experimenting with oil of turpentine, if it be introduced through the stopcock in Fig. 2 into the escape tube, the boiler becomes positive and the jet negative; if the stopcock is closed again the condition of things is soon reversed, as the oil is rapidly dissipated. With the use of olive oil the phenomena in general are the same, i. e., the jet of steam and water becomes negative and the boiler positive. But the condition is more permanent, the oil not being volatile. I find that a very little olive in the exit tube makes the boiler positive for a very long time.

(To be continued.)

Incandescent Wiring Tables.

BY LEE BRIGGS, OF NO. 5.

To start with I will take the wiring tables now in use, of which there are quite a number. In the first place a wiring table is for the use of wiremen who do not understand how to go about getting the proper size wire they need in any other way. In the second place, it is a quick and easy method for getting the proper size wire without having to stop to figure it out. Now, take a wireman who has used a table for any length of time, and he becomes so familiar with it that he rarely ever has to look at it. But supposing the table he has learned so well calls for, say, 1 per cent loss in potential, and he has a building to wire for, say, a 2 or 3 per cent loss; nine times out of ten he will not know what to do, and if not told better he will wire according to his table, using a wire that, although answering every purpose, is still not right, for the simple fact that by not knowing how to determine the proper size wire, he would be using a much larger wire than was necessary, and when you stop to figure out the cost on a large job, where about one-third more copper than is necessary has been used, you will have some idea what a costly mistake has been made. But such mistakes rarely occur, for no contractor will knowingly make any such mistake, and usually it is the other way. The specification may call for a 2 per cent loss, where he would use, say about 3000 pounds of wire, but by wiring for a 3 per cent loss he can save about 1000 pounds, and he will do it nine times out of ten. What is the result? He is the gainer by 1000 pounds of wire that some one else is paying for, but is not getting. Now I do not mean to say that all wiring contractors will do this, but I do mean to say that there are any number of such people preying upon the public. By such methods many a good honest contractor has lost a big contract by being too honest

to take advantage of the ignorance of others, while others not so honest will take this advantage, knowing that they are quite safe in doing so, as usually the architect has no means of telling whether the specifications have been complied with or not in regard to the loss or drop in potential. Now I did not start out to preach about the honesty or the dishonesty of wiring contractors, for, take them as a general rule, they are as honest in their dealings as any other class of people. I merely wanted to show what was to be lost or gained by not being able to determine the different sizes of wire, without the use of a table. Now, instead of relying upon any particular table, it would be to the wireman's advantage to be able to work by some rule, where, by a little study, he could tell the proper size wire and the desired loss in potential for any particular piece of wiring. Now while I am about it I will explain what the loss or drop in potential means, for fear that some one may not understand exactly what it does mean. The loss in potential in circuits, means that the wiring shall be such that drop, or loss in volts on any conductor due to the resistance encountered by the current in passing through that conductor, shall not exceed so many per cent of the voltage applied. Now there are several ways of determining the different sizes of wire, but for fear of taking up too much space with this article, I will leave that part of it to some one else, trusting some member will give some simple rule, which will be easily understood by all.

TRADE NOTES.

The Columbia Incandescent Lamp Company since their great victory over the trust, have been doing an enormous business and are compelled to build a three story 40x42 foot extension to their already large plant.

The Rose Electric Light Supply Company have been cramped for room for some time but were too busy to move. Necessity compelled them to, however, and they are now in commodious quarters at 3rd and Elm streets.

The Consolidated Engineering Co. of St. Louis has secured the electric light plant at Rochelle, Mich., at \$10,972, against 32 competitors. It is a municipal plant, forty street (Wood) arcs, thirty-two street lamps (Ft. Wayne) and 650 incandescent (Ft. Wayne) and 125 horse-power engine. An additional 54x14 boiler to present boiler capacity to be put in water works building. All incandescent work to be contracted with consumers.

The Masson Electrical Construction Company has finished putting up the fall illuminations and are proud of their work, and justly so. Having so many new electrical features in it has made it more difficult than usual, but every obstacle was overcome, and the illuminations are now bright haloes of glory for the Emerson Manufacturing Company as originators of the designs and the Masson Electric Construction Company as contractors therefor.

GENERAL NEWS.

Where Electrical Workers May Look for Work.

MINNEAPOLIS, MINN.—The owners of the Lumber Exchange Building will put in a dynamo and electric fixtures at a cost of \$10,000.

FORREST, ILL.—The city voted August 29th to issue bonds to purchase an electric light plant.

SMYRNA, DEL.—The town of Smyrna, Del., proposes to put in an electric light plant. All contractors are invited to bid.

HARRISBURG, PA.—At a meeting of the stockholders of the East Harrisburg Passenger Railway Company it was decided to increase the capital stock of the company from \$500,000 to \$1,000,000.

WASHINGTON, D. C.—The Washington Electric Light, Heat and Power Company has increased its capital stock from \$10,000 to \$30,000.

KALAMAZOO, MICH.—The Kalamazoo City Council voted to advertise for bids for lighting the city for five years or more.

LOS ANGELES, CAL.—The Board of Supervisors ordered that the franchise for the building of an electric railway between this city and Pasadena be again advertised for sale to the highest bidder.

KANSAS CITY, MO.—Extensive improvements will be made to the North-Eastern Electric Railway plant. Much of the rolling stock will be replaced or repaired and the track relaid. Frank J. Phillips, Supt.

NEWPORT, PA.—The Council is considering the electric light question.

BALTIMORE, MD.—The City and Suburban Railway Company is to have plans prepared for a power station of brick, with iron roof and columns, to contain a steam plant of 6000 h.p. capacity. Both arc and incandescent electric lighting will be furnished. Nelson Perin, President; J. E. Hayward, Superintendent.

LOS ANGELES, CAL.—The Los Angeles Iron & Steel Company will erect a rolling mill and put in electric lights.

DETROIT, MICH.—The site for the City electric light plant has cost the city \$12,000 more than the estimate, and the building, it is said, will exceed the allowance by \$15,000 more. The entire cost, as estimated, was \$600,000.

KEWAUNEE, ILL.—The Electric Light Company will increase the capacity of its plant in the city. The condition not given.

CINCINNATI, O.—Ground will be broken before the 1st of October for the Riverside Electric Railroad Extension. The line will extend down Hillside Avenue to the rolling mill and Lower River Road.

ATHENS, GA.—The Athens *Banner* calls attention to the fact that next July the contract for street lighting with the present company will expire, and it urges that the city build a plant and issue bonds to pay for the same.

NASHVILLE, TENN.—The Board of Public Works and Affairs has notified the Cumberland Electric Light & Power Company to erect fifty-five additional street electric lights.

PHILADELPHIA, PA.—Wendell & Smith, representing the Drexel, Childs, Walsh Syndicate, have applied for charters under which to operate their system of heating and electric lighting plant at Overbrook, where they propose to erect a power house.

NEW HAVEN, CONN.—The Morris Cove, the Whitney Avenue and the State Street Surface Railways have been bought by a syndicate organized last winter with \$1,000,000 capital, and the three roads will be equipped with electricity. The city division will be running before December and will be double tracked. The line will be extended to Lake Saltonstall next spring, and it will then include forty-two miles of road. The new company has issued a mortgage to the American Loan Trust of Boston for \$6,000,000. The new officers of the road are: David Corry of New Haven, President; Chas. A. Warren, Vice President; Secretary, Treasurer and General Manager, George A. Dodge of New Haven.

SAN BERNARDINO, CAL.—At a meeting of the City Council the City Attorney was authorized to prepare a form of advertisement for bids to light the city for the next year at the expiration of the present contract, on November 15th.

GRANT'S PASS, ORE.—The new Grant's Pass Water, Light and Power Company, capital limited to \$30,000; and the principal place of business will be at Grant's Pass. P. H. Harth, President; Will Jackson, Secretary. The purpose of this corporation is to purchase, hold and erect dams, reservoirs, etc., in Rogue River to supply the city with water and electric lights.

PORT ANGELES, WASH.—An electric light plant and water power will be constructed.

HARRISBURG, PA.—The Cumberland Valley Electric Passenger Railway Company, \$500,000, has been chartered, to connect Carlisle and Boiling Springs. Incorporators: Oliver H. Ormsby, S. Ritter Ickes, W. J. Ickes and S. H. Nigton, all of Altoona, Pa.

GLADSTONE, MICH.—The Gladstone Electric Light and Power Company, capital stock \$50,000; John W. Rendrick and John Woods of Minneapolis; Edwin C. Tice of Gladstone, Mich., and R. H. Relph of St. Paul.

SIDNEY, O.—There will be improvements made in the electric light and gas works by putting in an incandescent light plant. This will necessitate the addition of a dynamo and boiler.

ATCHISON, KANS.—The Atchison Street Railway has been sold to a newly-organized company, the Atchison Electric Light and Power Company, of which Edward L. Norton of New York is President. The lines will be immediately equipped with electricity. An electric light plant is also to be erected.

FARMINGTON, ILL.—Mr. David Nappin intends to increase the capacity of the electric plant. A 150-horse power boiler and new dynamo and an engine with a capacity of 1500 lights will be added.

The St. Louis Electric Club

Will scarcely resume their regular business and social sessions till after the closing of the World's Fair on Oct. 31st, as a majority of its members are making weekly trips to the White City. They go singly, in pairs, triplets and squads, and the coming long winter evenings will pass pleasantly in exchanging views and telling experiences of the "greatest show on earth."

Among the earliest visitors since our last issue, was Ayer of the municipal, whose genial smile beamed on the delegates to the World's Electrical Congress, and whose *search light diamond* cast its bewildering rays on and helped illuminate the "McMonnie's Fountain."

Wagner of the municipal was also there, but being *en famille*, his trips to that Mecca of sight-seers—the Midway Plaisance—were less frequent than on former visits.

Matlock, of the Laclede Power Co., took unlimited rides on the Intramural Railroad, but did not forget to visit Cairo Street and the Turkish Theatre, and can criticise the dancing in a manner that proves he was an often and interested spectator thereof.

Alphabetical Allen, Jr., of the same company, makes *duty* visits to the Electrical Building, but his *tan* shoes invariably and involuntarily turned in the direction of the Midway, and unconsciously, as it were, stopped at the Congress of Beauty.

Oleaginous Flower of the Acme Filter Co. was there, and though—

"You may crack, you may break
The vase, if you will,
But the scent of the *Flower*
Will cling to it still."

Louis Nahm of the American Electric Manufacturing Co. (the Chesterfield of the club), was also there, and, seated on a camel with a Turkish fez on his head, a chibongue in his mouth, and enwrapped in a gaudy burnous, he only needed a harem following him, to make an ideal Turk.

Churchill of the Emerson Co. was seen drinking unlimited quantities of iron water, and in explanation thereof, said that the color of his hair was due to too much iron in his make-up, and therefore he was trying the homeopathic remedy of *similia similibus curantur*.

Arnold of the General Electric Co. was a constant visitor to the Beauty Congress and gave such glowing accounts of the "40 Beauties," that his partner, Rosenthal, took the first train to the Windy City to inspect the fair ones himself, and was so pleased with them that it is rumored that he and Arnold will "star" them through the United States after "the fair is over."

It cannot be said of Geo. Purcival that—

"He had no music in his soul,
No ruffles on his shirt,"

For "the music in his soul" he certainly has; of "ruffles on his shirt" deponent knoweth not. He has been making a close study of oriental music as played in the Midway, and can find a "concourse of sweet sounds" in the unmellodious tom-tom, and to his cultured ear even the dirge of the torturers has melody in it. He invariably wound up his peregrinations at the White 'Orse H'Inn, and partook of a genuine "H'old H'English" dinner of roast beef and Yorkshire pudding and plum duff, washed down by several tobs of "Alf and Alf."

Irrepressible Fred Einstein of the Consolidated Engineering Co. is said to have taken a course of private lessons from the howris that perform the "Danse du Ventre" and has made such progress therein that he promises to give an exhibition before the club sometime during the winter.

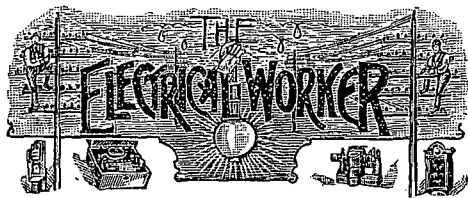
The legal members of the club were also well represented. C. Fowler, of Fowler & Fowler, has become quite an Egyptologist, and was greatly interested in the tombs of "Thi and Apis," and their hieroglyphics are as plain to him and can be read as easily as Coke, Blackstone, et al.

Higdon and Longan were also there and were wondering how many times "multi-millionaires" they would be if they had procured all the patents exhibited at the Fair.

Geo. Knight of Knight Bros. was also a visitor, and was fond of repeating—

"The (K)night shall be filled with music,
And the cares that infest the day,
Shall fold their tents like the Arabs,
And as silently steal away."

THE BUZZER.



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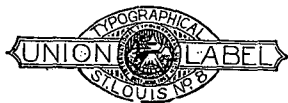
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AS THE ELECTRICAL WORKER reaches the men who
do the work, and recommend or order the material, its
value as an advertising medium can be readily appreciated.

St. Louis, Mo., September, 1893.

Advertising Rates on Application.



The third annual convention of the National Brotherhood of Electrical Workers of America meet in Cleveland, Ohio, on Monday, Nov. 13th next, at 10 a. m. Local Union No. 16 has made all necessary arrangements. The convention will be held in the hall of the Union at 94 Superior Street. Hotel accommodations have been secured, and committees will be in waiting at all depots to welcome delegates. Full details will be published in our next issue.

Delegates to the convention must be elected next month (October), and Unions to be entitled to representation must be in good standing, and officers and members of locals should see to it that all indebtedness to the general office is settled up to date. The basis of representation is given in Art. XX., sec. 4, of the constitution, and in connection with this we hope officers and members will study carefully page 21. Credentials will be furnished to each Union on the basis of the per capita report and names of members on file at the general office.

We refer small or distant unions to Art. XX., Sec. 7, and hope they will take advantage of this provision and by clubbing together be represented—each Union paying its quota of the expense.

As Unions are required to defray the expenses of their delegates, we are often asked what the probable expense will be. This will depend on the taste of the delegate and the liberality of the Union he represents. One delegate may get along with \$50, while another may find \$250 to be a small allowance. The necessary expense may be summed up as railroad fare and hotel accommodation, with a small allowance for incidental expenses. Special rates of \$1.50 per day have been made at one of the leading hotels. The smaller Unions will probably find a few generous members who will consider the pleasures of the trip sufficient compensation for the time lost, and will only ask to be reimbursed for the expenses incurred.

The coming convention will be an important event in the history of our organization. With two years' experience to guide our deliberations, we should be able to correct many of our former errors and legislate on broader principles. Eighteen hundred and ninety-three, with its defeats and victories, can furnish sufficient food for thought and study. We offer a few suggestions.

1st. Can the best results be attained by an Executive Board constituted and geographically distributed as the present board is? The expense of calling a meeting of the E. B. at present would be so great that it would be unwise to do so.

2nd. Should there not be two assessments each year for the support of the journal—one in January and one in July—of fifty cents each?

3rd. Can we not improve on our system of issuing traveling cards?

4th. Should not the number of members necessary to constitute a quorum bear a certain relation to the number of members in good standing in each Union with a membership of twenty-eight and over, say, one-fourth.

5th. If the last clause in Section 2, Art. III., were made compulsory, would not better results be obtained, the E. B. to decide on the number required?

6th. What action should be taken towards fulfilling the spirit of Art. II.; (1) the apprentice system, (2) to maintain a higher standard of skill, (3) education, lectures, fraternal feeling, etc., (4) arbitration, (5) to reduce the hours of work or make eight hours universal within a certain limit of time.

7th. Should not the initiation fee be uniform in all Unions, after being organized a certain time, say three months?

8th. Should not the protective fund be forwarded each month to the general office, and be increased to 10 cents per member until a certain amount has accumulated in the treasury? [Read Secs. 14 and 15 of Art. XIX.]

9th. What provision should be made to enforce Art. VI., Sec. 1, or to know that it is enforced?

10th. What further restrictions, if any, should be made to Sec. 5, Art. VI.?

11th. The following substitute for Sec. 10 of Art. XIX. was passed by the E. B.: "Any local Union going on a strike without the sanction of the E. B. shall be suspended or expelled." Should this be incorporated in our constitution?

12th. Should there not be some regulation by which the qualification of a member for a local office can be determined?

13th. In the future are not biennial conventions sufficient for all requirements of the brotherhood? This would save three or four thousand dollars to the Brotherhood every two years.

Timely Words From Our Grand President.

To the officers and members of the N. B. E. W., greeting:

As it has been some time since you heard from me through our journal, you may think it was neglect on my part. To some extent this would be true, were it not for the hard work pertaining to the position of an organizer. Between trying to organize different cities, and keeping up the necessary correspondence pertaining to organizing, some days seem short, even with twenty-four hours.

We are at present in what is usually called a panic, or hard times, and with the suspension of a great deal of work there are a large number of our men out of work, traveling through the country. This ought to teach us a lesson, according to the old saying, "In time of peace prepare for war." There are thousands of men in all trades, and the electrical workers offer no exception, who do not think any further than from day to day. When times are good they spend every cent they earn, and when dull times come on and they are thrown out of a job they have nothing to fall back on, and are willing to go to work at almost any wages,

under the plea that they can't starve, and thus reduce wages.

The present hard times have, no doubt, been brought on by vicious legislation and designing individuals, and as the rank and file of the great army of organized labor never give even the simplest principles of political economy or finance a moment's study, I think the article in the constitutions of all labor organizations, in which the discussion of questions of a political nature are prohibited, should be stricken out, and for the electrical workers I would suggest to the delegates to the next convention to insert in our order of business, following the discussion on practical electrical subjects, discussions on political economy and finance.

I notice in the last issue of the ELECTRICAL WORKER that some of our locals call attention to the fact that the time for our next convention is near at hand, and suggest that the subjects to be brought before the convention should be thoroughly discussed in advance. The principal subjects to be brought before our next convention should be, first: How to organize thoroughly the electrical workers of the U. S.; second: Is it necessary to have a convention every year, or would it not be wise for us to follow the example of older organizations and have one every second year, and thus save a large amount of money, both to our local and the national organization? third: Is it possible for us at the present rate of per capita paid to the general office to pay the amount of benefits required under our constitution, and the general expense of the organization, and at the same time to accumulate a fund in our treasury?

I hope every brother will make this a study and count how much he will pay in a certain number of years, and see if it is not far below the amount expected in return. Also our official journal, which has been brought to such a high standard in such a short time, is it possible for us to keep it up at the price charged to members at the present time?

Now, brothers; do away with the old idea that the E. B. is the national organization. That this is not so is shown by the majority of our locals, who are always ready to ask aid and the fulfillment of every provision in the constitution when they are entitled to benefit, but kick when asked to pay dues or assessments, without which it would be impossible to carry on the organization. The reason I bring this matter before you is this: Any one of you is liable to be elected to an executive office, and I would not like to see you sail in a ship of poverty, harassed by everyone for want of money, as the last two E. B.'s have been during the time I have had the honor of being Grand President.

A few more words for the benefit of all. There have been more than the average number of men killed in our trade during the past year. Some were killed by wires which were supposed not to be sufficiently charged to kill. It is my belief that nearly all those deaths were caused on account of carelessness on the part of the companies or workmen. Our heavily-charged wires have been until lately comparatively new, but are now beginning to show their neglect, and will grow worse each month unless we do something to prevent it. Each week new ones are added to poles that are already crowded, and as the insulation on the older wires is nearly all gone it is as much as a man's life is worth to climb some poles, particularly on a wet day.

A great deal could be done to prevent accidents if each man learning the business should work under the jurisdiction of the brotherhood until he thoroughly masters his trade. Still we can do a great deal to avoid accidents if we do our duty as brotherhood men, and never leave a job in a dangerous condition, and refuse to do so even if asked by an incompetent foreman or superintendent. In a large number of cities they are still tying in high tension wires with steel or iron tie wires. This should be done away with as soon as possible. There is also a great deal of inside

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wiring done without paying the proper attention to insulation, more especially in old buildings, where the work is concealed, and the wires are often run across gas and water pipes. As soon as the insulation gives out, which will not be very long, the wires become grounded, and with the persistency shown of late, for the primary current to walk through the transformer and enter the house, a two thousand volt ground is not a very pleasant visitor to meet. Our members should learn to do good work at all times, and it is a duty they owe when property and life are endangered by poor work.

For the education of our members I believe we should discuss a certain subject each month. I have often heard in our meetings the question asked: Is it possible to reverse the polarity of a dynamo while running? I have taken stand that it could be done by a greater current than that generated by the machine, such as lightning or a cross between two machines running opposite to each other, and one having a greater capacity than the other. I should like to see this subject discussed in our meetings, and have the answers included in the report of the Press Secretary.

Trusting that those few suggestions will meet with favorable consideration, I remain,

Yours Fraternally,

HENRY MILLER.

Allegheny, Pa., Sept. 8, '93.

District Council No. 1 of New York.

SEPT. 7, 1893.

The regular monthly meeting of the Council was held at Kelly's Hall, corner Grove Street and Newark Avenue, Jersey City, C. W. Hoadly, presiding.

The following resolution was offered and adopted: That all members of 5468 A. F. of L. who have joined locals of the Brotherhood attached to District No. 1 of New York be dropped from the rolls and ordered to pay their indebtedness to Local No. 3, which has undertaken to liquidate all claims against 5468 A. F. of L.

The reason for this action is that the New York organization of wiremen that was in existence prior to December, 1892, was a local attached to the general office of the American Federation of Labor, and as there are always men at any time ready to take advantage of an opportunity to escape the payment of their indebtedness to any organization, Local No. 3 is determined that the Brotherhood shall not suffer from any of the questionable acts of those that were members of 5468 A. F. of L. The charter which the New York men held as 5468 A. F. of L. when they joined the Brotherhood, and became Local No. 3 has been turned into the Federation and all those that were ever obligated to the Federation will find when they make inquiries that the National Brotherhood also belongs to the Federation of Labor and will see to it that no matter under what guise they undertake to default they will find that the Federation will follow them.

Local No. 3 invited all affiliated locals of the district to parade on Labor Day with them.

C. W. HOADLEY,
Pres. Sec.

213 Willis Avenue, N. Y.

Orders have been coming in to us from Maine to California for Atwoods "Practical Dynamo Building," Grier's "Tables on Wiring" and Lintern's "Motorman's Hand Book," the three latest books on the electrical subjects they represent. Send orders for them or any other electrical work to the office of the ELECTRICAL WORKER, 904 Olive St., St. Louis, Mo.

Notice—As per instructions from No. 38 we hereby notify all locals that Fred F. Fields, formerly of that local, is indebted to that Union to the amount of \$14.50, and requests us to publish this notice of warning to all our Unions.

A new kind of wire for telephone use, having an aluminum-bronze core with a copper-bronze envelope, is being experimented with in Germany. It is said to have a low resistance and great tensile strength.

NEW BOOKS.

We want to call the attention of our brothers to the electrical books we advertise. They are the very latest publications on the subjects treated and should be in the possession of every electrical worker. We can also furnish any other electrical work you may need at or under publishers' prices.

From Hon. Frank H. Betton, Labor Commissioner of Kan., we have received copies of the Eighth Annual Report of the Bureau of Labor and Industrial Statistics, and congratulate the Commissioner on the masterly manner of its make up, and thank him for remembering us.

The Seventh Biennial Report of the Bureau of Labor Statistics of Illinois has just come to hand in the shape of a neat cloth-bound volume of over 600 pages, and is particularly replete with information about the "Sweating System of Chicago" and "Statistics of Coal Production." It also contains a very interesting table showing the wages, working time and earnings of women in electric supply establishments in Chicago, and gives the average weekly pay of 270 girls at \$5.78, nine hours being a day's work.

The Building Trades Council of Chicago has just published a magnificent and profusely-illustrated volume, entitled the "Progress of Labor," or a resume of the rapid growth in power and importance



C. W. Hoadley, President of District Council.

made by working men since the days anterior to the discovery of America by Columbus. It contains sketches of prominent events in the life of the great discoverer, with a very handsome portrait of him. Also portraits of the officers of the different labor councils of Chicago, and of leading citizens identified as Friends of Labor. The pictures of the World's Fair Buildings are works of art, and the entire make up—printing, paper, etc., is of the very best and reflects great credit on its editor, Alva J. Beatty, and his assistant, T. J. Howard, Secretary United Carpenters' Council. The object of the work is the establishment of a reading room and library, free to anyone, but devoted particularly to the use and benefit of Chicago working men, their wives, their children and their friends.

You

Can obtain a pack of best quality Burlington Route playing cards by sending 15 cents in postage to

D. O. IVES,
Gen'l Pass. and Tkt. Agt., St. Louis, Mo.

Personals.

We are in receipt of a very handsome chart, entitled, "Famous Generals in the Labor Army," published by Hollister Bros. of the Eight Hour Herald. The only fault we find with it is the absence of the counterfeit presentments of Hollister Bros. themselves.

Our esteemed representative in Nashville, Bro. Longdon, had a little experience with the business end of the mystic fluid last week. Had the current known that he was a newspaper man it would not have wasted its strength on him, but have passed him by for some easier victim.

Brother Wm. C. Prickett, a prominent light in Local 21, had the misfortune to fall from a pole and break his arm. This is the second fall he has had this summer; but you can't kill a good man. Brother Prickett is one of our best correspondents, but since his accident his letters are all written in the neatest of feminine chirography.

Dan Lafferty, the genial heavy-weight ex-President of Local No. 1, has been setting the effete Easterners a very rapid pace, both in working and running. Dan won the fat man's race in New York on Labor Day and showed how easy it was for a wild and woolly Westerner to accomplish whatever he with hands and feet attempts.

Brother C. W. Hoadley, the business agent of No. 3, has his hands full looking up delinquents, presiding at district councils and acting as Press Secretary, etc. Notice his counterfeit presentment on this page. Thanks for your picture, Brother Hoadley, it has been taken several times for one of the foreign delegates to the Congress of Religion.

Brother C. L. White, President of No. 9, is decidedly the right man in the right place. He is a good parliamentarian, has the constitution by heart and can sit down very hard on a chronic kicker or obstructionist. He sees a point very readily, gives his decisions quickly and justly and can not be bull-dozed. May your shadow never grow less, Brother White.

Vice-President W. F. Cooney of No. 9 is a young and good-looking widower and an ex-member of the Nebraska Legislature. A lady friend, Mrs. K. of Cottage Grove Avenue, was being remarried the other evening. Brother Cooney was one of the most favored guests. The dominie mistook him for the groom and had almost tied the nuptial knot ere the mistake was discovered. As Brother Cooney and the blushing bride had each been there before, it seemed rather suspicious to some of the guests that they made no protest, and it was rather strongly hinted that both would have been happy if the mistake had not been discovered in time.

For the past month the busiest man in town has been James Cox, Secretary of the Fall Festivities. His office has been thronged daily by enterprising reporters, exhibitors clamoring for more space, advertising agents, hayseeds asking passes to the exposition, and country parsons demanding free car fares, free passes and free board and lodging. To one and all Mr. Cox replies in the most urbane and polite manner, never loses his temper and bows out each visitor with a "smile that is child-like and bland." Constant practice has made him so perfect that he is now "all things to all men."

Brother Chas. B. Quealy, President of No. 41, is one of the best educated men in the ranks of the Brotherhood. Of a commanding appearance, tall, well made and with clear-cut features and a well-trained voice he is one of the best orators in Chicago. At a certain labor demonstration he presented one of the Mayors to the boys and his speech on the occasion took the wind completely out of the Mayor's sails and rather opened that gentleman's eyes as to what oratory is and what a horny-handed son of toil can do in that line. He is very liberal in money matters, and is always ready to "go down in his jeans" for the good of the Union or to help a needy brother. We hope Brother Quealy and his silver tongue will be at our Cleveland Convention.

CORRESPONDENCE.

[The Press Secretary, though an officer of the Local Union, is really a resident correspondent of the *ELECTRICAL WORKER*, and should keep his paper thoroughly posted on all matters pertaining to the electrical industry in the vicinity he represents. New plants, extensions of old ones, new electric roads, state of trade, new ideas, electrical novelties and accidents are a few of the topics to report on. Please notice that the minutes of the meetings are not required, except the report of new officers, and such matter as may be of general interest to all members.]

ST. LOUIS, MO.

SEPT. 15, '93.

Editor Electrical Worker:

As the press secretary of No. 1 is on a vacation I hope I am not intruding too much if I furnish a few items.

I suppose the boys throughout the country are interested in the condition of work. The wave of financial depression which swept over the country early this season and blighted the prospects of what promised to be one of the best years for electrical workers did not miss St. Louis. A great deal of new work which was proposed has not even been started. The old companies have all kept their regular forces busy, but the usual amount of new work has not been done, consequently few new men have been employed. St. Louis has fared better, probably, than most cities, and if it were not for the large number of workers who are constantly coming here from other cities we would scarcely know that we are passing through a panic.

On Labor Day No. 1 turned out 200 strong and won fourth prize. If the boys had taken a little more interest in the parade before the very last meeting they could easily have captured first prize. The float was a daisy, but, like all other arrangements, it was left to the last moment and part of the decoration was not finished until the float was moving into the line of march. The float contained two poles with cross-arms and was decorated with flags, banners and bunting.

When the procession started to move and the band struck up "Marching Through Georgia," a lineman climbed each pole and proceeded to work, and before the parade reached the picnic grounds the float looked like a miniature central station; arc and incandescent circuits were run, transformers, lamps, telephones, call boxes, etc., were placed in position, and in fact, everything that an electrical worker is required to do in every-day work was done on the float. The crowd of spectators showed their appreciation by cheering as the float passed.

Brother Frank Kinsley deserves great credit for his work in getting up the float and arranging for the parade.

Brother Johnson, now that he is papa of a 10-pound lineman, looked as proud and happy perched on one of the poles as a young rooster with its first spurs.

Brothers Herbert, Purkey and Tate claim that they should have double pay for the work they did, as they could not work next day on account of—well, let her go.

Brother McCarthy made an ideal marshal and rode his brown charger like an old veteran.

No. 1 has the usual quota of kickers, hairsplitters and obstructionists. Good and timely kickers are all right, but when members kick for the sake of notoriety or to obstruct the regular proceedings of business it is time for them to be called down. We are in the midst of a by-law controversy, and judging from the manner in which some of the members saw the atmosphere while speaking they are willing to back their opinions with a number of pounds avoirdupois.

Several meetings ago we received a set of resolutions from No. 9 reflecting on the Grand Secre-

tary Treasurer. As he is a member of No. 1 it is no more than justice to him to say something about it. In the first place the charges are without foundation as the Grand Secretary Treasurer is acting under the Executive Board, and if that body sees fit not to publish certain things in the paper and think that the welfare of the organization would be jeopardized by publishing such matter they have a right to instruct the Grand Secretary Treasurer to leave it out. Also, as editor of the *Journal*, the Grand Secretary Treasurer should have discretionary power to pass on anything published in the *Journal*. As it seems rather singular that resolutions insisting on certain technicalities that common sense would dictate should not, under the circumstance, be complied with, and particularly so when coming from a Union that never paid much attention to technicalities in their own affairs, we thought we would inquire into the real cause why those resolutions were sent out. It required only a very little investigation to show that a few members of No. 9 have been taking lessons in Cook Co. politics, and knowing that the Convention is near at hand, when new officers are to be elected, they took this despicable means to cast reflections on an officer who has for two years devoted his whole energies to the advancement of the Brotherhood. The resolutions were sprung on the meeting after 1 a. m. Sunday morning when nearly all the members had left the hall, and it is safe to say that at least nine-tenths of the members of No. 9 never knew anything about them. We are only sorry that a great Union like No. 9 should allow a few designing individuals to cast reflections on her fair name without bringing them to task and thus show that the rank and file of No. 9 repudiate such proceedings.

Fraternally yours.

A MEMBER OF NO. 1.

MILWAUKEE.

SEPT. 9th, 1893.

Editor Electrical Worker:

We had a very pleasant day here on the 4th, but we did not turn out as strong as we expected to, owing to the dull times here at present. Bro. F. P. Raymond, our worthy president, and Bro. Wm. Quinn, one of the worthy delegates to the Federal Trades Council, assisted in entertaining all those who were enjoying the terpsichorean part of the program in the evening, and did themselves and our worthy union credit. We have something of a phenomenon to present you with this time in electric construction, and No. 2 has the honor of being represented. Bros. Peter Keelyn and Albert Smith let their late employers and four other local construction companies know that they can figure and make out a practical specification, and in my estimation, can give any local company pointers in drawing up a contract. They are at present rewiring the Plankinton House, the only work worthy of note in Milwaukee. They had four competitors who have not slept ever since, and one firm in particular tried very hard to procure the contract by having Mr. Plankinton get the brothers to give bond, claiming there would be mechanics' liens on the work after completion; but we have in our worthy union another brother, Q. Jansen, who happens to have collateral enough to satisfy all emergencies of this kind, who gave them his signature and with the help of a friend of Brother Keelyn's and one of Brother Smith's, they got a bond worthy of a bank president at the present time. In the future, the local contractors will be more careful when they have practical workers to compete with. They have also completed the illumination of the show windows of The Columbia, the largest clothing house in the city. We had the pleasure of installing one more street railway man at our last meeting who made it very interesting for us during the evening. We have had as good an attendance at our meetings lately as any union in the Brotherhood, and I am sure, with the benefit of the discussions we have had and will have through our new Bro. A. Von Hoffman, who will

present the union with a blackboard at our next meeting, it will continue. Hoping work for our craft will soon arrive, I remain,

Fraternally,

M. J. QUIRK,

Press Sec'y.

If there are any companies wanting men, we have some good, young stock here.

NEW YORK.

SEPT. 6, 1893.

Editor Electrical Worker:

We shut out in our last letter much valuable information to the trade because of the fact that some of the preliminary work lacked completion. We think that affairs have taken such form at this writing as to enable us to commit ourselves with authority, without fear of question or contradiction.

In the January number of the "WORKER" there appeared a copy of the agreement entered into between the Electrical Contractors' Association of New York, and Local No. 3 of the National Brotherhood, signed about January 15, '93.

That agreement was subject to a good deal of caustic criticism and received no very hearty support from the Electrical Contractors' Association. As a result of charges of bad faith on both sides, and no apparent desire on the part of the Electrical Contractors' Association to abide by its provisions, the Local returned it to the Electrical Contractors' Association, with the notice that the Local would again enter the central trade bodies of the city from which it had withdrawn six weeks prior, at the signing of the agreement, which contained a clause prohibiting their participation in sympathetic strikes.

Then began a series of events that have been styled "criminations and recriminations" on the part of the Electrical Contractors' Association and the local.

Prime among the moves on the part of the local was the strike against the H. Ward Leonard Co., on Friday, May 12, '93. All of their employes within reach, twenty in number, were called on strike by the local. Sixteen of them obeyed the call, but there was one among the sixteen that nature never intended to be a "Horatius at the Bridge," or a Paul Revere on the ride that made his name famous.

Inside of forty-eight hours from the time he was called out, he had given in to the overtures of the company and returned to work. Therefore, we feel that although four of our members refused to come out, that "that man" (?) should head the list, and it is the request of Local No. 3 that his name be printed in upper case caps, inverted so that all of the acquaintances of "Pittsburg Joe" may know what manner of man he is.

'NOSDWOHL HæSOI
WILLIAM SOONS,
EUGENE NEWMAN,
T. P. SEARLE,
FRANK MIDDLETON.

These are five persons that employers can count on, and please remember that employers come and go while employes go on forever, or so long as life remains, or until released from their obligation by the national brotherhood.

Following closely upon the action of the local came that of the Electrical Contractors' Association, by which one or more men were dropped from the rolls of the eighteen different firms.

This started May 22, 1893, and continued for four weeks, or until we had sixty men locked out. They could all have employment if they would resign.

We put them on pay just as if they had been called on strike. There was \$600.00 paid out to them.

A number of brothers resigned when asked before their discharge. Those mistaken brothers have already seen their error and desire to return.

That there were a number of resignations that never got any farther than the offices of the companies extorting them, is a well-established fact.

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Judging from the evidence accumulating in the "conscience fund," which is the name given to the testimony of the prodigals that appear before the Executive Committee every Monday night.

As we stated, our delegate had a seat in the Board of Delegates of the Building Trades at the time of the strike.

The board endorsed the strike and appointed a committee to meet the Electrical Contractors' Association. As a result the strike was declared off, and a new agreement was drawn for the local by a joint committee of five from the board and five from the Contractors' Association, of which the following is a true copy:

AGREEMENT BETWEEN THE ELECTRICAL CONTRACTORS' ASSOCIATION OF NEW YORK CITY AND LOCAL NO. 3 OF THE NATIONAL BROTHERHOOD OF ELECTRICAL WORKERS OF AMERICA. DATED N. Y., JULY 6, 1893.

It is hereby mutually agreed by and between the Electrical Contractors' Association of the first part, and Local No. 3 of the National Brotherhood of Electrical Workers of America, hereafter known as the parties of the second part, that no general strike or lock-out against any of the parties named shall be ordered by either association or any officer thereof, unless the aggrieved party shall first submit, in full written detail, the grievance or question at issue to an arbitration committee, consisting of four members of each association, these eight members to select a ninth member, and the decision of the majority of said committee to be binding upon both parties hereto; the meeting of arbitration committee to take place within five days after the notification is given. In case of grievance the party aggrieved shall send official notice in writing to the party complained of.

2. It is hereby further agreed that no change in the rate of wages, namely \$3 per day for journeymen, nor in the hours consisting of a day's labor, nine hours, five days per week, and eight hours on Saturday, shall be asked for by any of the two Associations named, except the changes to take place on the first day of April in any year, and not then, unless notice is given ninety (90) days preceding by the Association asking for such a change. Such notice is to be given in writing, and officially, to the secretary of the Association in question.

Any boy between the ages of fourteen and twenty-one, who had worked at the trade not less than two years, and is receiving not less than \$1.50 per day, can, upon recommendation of three (3) members in good standing, be proposed to become a member of the Union, upon payment of one-half of the regular initiation fee of a journeyman, paid in one-half rate installments, under the same rules that govern payments for journeymen.

3. It is hereby agreed by the parties of the first part that none but members of the parties of the second part, except as provided above, shall be employed by the parties of the first part, and it is further agreed that the parties of the second part shall not work for any employer who is not a member of the Electrical Contractors' Association.

4. This agreement shall apply only within a distance of 25 miles from the City Hall, New York City.

5. All applicants to the Union hereafter shall pass an examining board before being eligible to membership in the Union, said examining board being composed of two members from the Union, two members from the Association, and a fifth member chosen by these four.

Said examining board shall determine the qualification and rating of applicants, and give to successful applicants a card indicating their qualification and rating.

All members of the Union at present in good standing shall pass said examining board within six months from date.

Said examining board to have six such examinations during the next six months.

After six months from this date there shall be an examination upon the first Monday of January, April, July and October.

Each member of said board shall receive ten dollars for such examination.

6. This agreement to continue for one year from date hereof.

7. It is further agreed by both parties that the following rules shall govern both parties to this agreement.

In witness whereof, the two associations named above have caused their proper officers to sign this agreement.

Signatures:

CONTRACTORS' ASSOCIATION.

Signatures:

LOCAL NO. 3, N. B. OF E. W.

Local No. 3 feels that as it was agreed by and between the grand officers of the Brotherhood and this local at the time of our entry into it, that as this was distinctively an inside wiremen's local, it should so remain, and should have jurisdiction over New York, Brooklyn, Jersey City, Hoboken and Newark, from all of which the fare is covered by an expense of ten cents, and in all but one, that outlay pays for the round trip.

In consequence of such an understanding we have issued a placard bearing a fac simile of our working card and sundry bits of information for employes and non-union men, which we have posted in the different offices. It bears this notice at its foot:

"Affiliated locals of the Brotherhood please take notice that the rights, privileges and benefits conferred by this agreement are for all the members of the National Brotherhood, but before they will be entitled to enjoy the same they must come under the jurisdiction of Local No. 3, which has secured these articles of agreement for its members only.

Per Order,

EXECUTIVE COMMITTEE."

In other words, a wise paternity does not desire to "Spare the rod and spoil the child." The Arbitration Board mentioned in the agreement has effected a permanent organization. The representatives of the Electrical Contractors' Association are: Mr. H. Ward Leonard of the H. W. Leonard Company; Mr. James R. Strong of the Tucker Construction Company; Mr. Edward Keifer of the Western Electric Company; Mr. M. J. Hatzel of Hatzel & Beuhler. For Local No. 3: Bro. J. J. McPeak, Bro. John Yates, Bro. C. Ingham and Bro. C. W. Hoadley.

As the ninth member, Commissioner Feeney of the State Board of Arbitration has very kindly consented to serve. Within six weeks from the signing of the agreement the local called for a meeting of the board and presented ten claims against the E. C. Association. Everything was met in good spirit, and while the justness of some of the claims was admitted, the board took occasion to remind both parties that all and even more than had yet been brought up could be easily settled by the representatives of either parties exchanging views by mail or in person, and thereby obviate the necessity of taking up the valuable time of all parties by such meetings of the board. And it is now understood that it is only to be called together when extreme cases arise which fail of settlement by the parties interested.

The Examining Board provided for in the agreement has completed its permanent organization and at its meeting Friday, the 8th of this month, will announce a date to receive applicants for examination. It is composed of the following gentlemen: For the E. C. Association—Mr. J. R. Strong, Tucker Company; Mr. John Hunt, Lunder & Hunt. For the Local—Mr. J. P. McMahon and Mr. G. H. Middleton. The fifth member is Mr. John Paul.

The following are the grades for examination and the form of application for examination.—[On account of the number and length of the communications received this month, we must leave out the classification, rules, etc., as well as other portions of Bro. Hoadley's valuable letter.—ED.]

Pursuant to a vote of Local No. 3, at its regular meeting August 17th, 1893, we publish the name of Emile Robiole, a Frenchman from France, 5 feet 7 inches tall, brown hair, grey eyes, square shoulders; speaks with decided French accent; for several years he resided in New York; has been as far West as St. Louis, Mo. Has "scabbed" it in the trade here. His \$25.75 was returned to him and the doors of No. 3 closed. Such an ignominious reception as was accorded him when he was escorted into the room to get the money it would be hard to describe.

The day we celebrate has passed with all its pleasures and Local No. 3 feels proud of the share it took in the parade and the other events which followed.

We gathered at our hall at 8 a. m., and at 9:30 Grand Marshal Florence Stanton, assisted by his aids, Brothers George Willard and William Ivory, had the 400 men in line ready for their place in the second division. Many were the complimentary remarks that were heard as we journeyed down town. On many a corner could be seen faces and forms that graced the parade of last year that had fallen out of our ranks during the struggles that we have had to maintain our rights. We venture the statement that if a clear conscience is shown by an open, pleasant countenance, a student of human nature could easily see that the brave and bonnie boys in the ranks had no cause to regret past acts or feel chagrined over either defeats or compromises. While if "It is hard to kick against the pricks," those who have deserted us have every reason to be thankful that all are not measured by the same standard and that as they have early found their level they can now set about undoing the mistakes in their past and make another attempt to be men.

We had several visitors from adjacent locals and had it not been for the disastrous work done by the gales of the past two weeks we would have had many more. As it is every available man has been pressed into the service to repair the line troubles in the city and suburbs, which simply shows how they can get along without the mechanics. See?

In the games at the Central Labor Union picnic the National Brotherhood shown at a very high candle power. In the fat man's race, open to all, Brother Daniel Lafferty, ex-President of Local No. 1, now of 34, Brooklyn, carried off the first prize. Then there was a fourth of a mile race between Brothers Michael Bergin and C. W. Hoadley. The money found equal takers on both entries; both men came to the scratch promptly, as if they had never been late in the morning at work, and at the sound of the pistol were away like the wind. It looked like a walkover for Bergin until Hoadley unlimbered and let out on a ball-bearing, pneumatic tire, Nancy Hanks gait at the finish, when he received a ride in a floral chair illuminated with miniature lamps from a storage battery.

Brother John Volkmar entered for the 100 yard dash, but as there was a large field and many amateurs from local clubs all he could do in a civilian's dress was to hold fourth place. However, he made a very creditable showing.

Brother Matt. Hettrick brought out a team and gave a good exhibition of the manly art of self-defense. Of course, it takes money to make the mare go, and the boys responded when the hat went around.

Yours Fraternal'y,

C. W. HOADLEY,

Press Sec. Local No. 3.

213 Willis Ave., N. Y.

NASHVILLE, TENN.

Editor Electrical Worker:

Never in the past history of Nashville has the laboring element "humped themselves and shown up as they did on Labor Day, '93." And this too in spite of the hard times and financial stringency. The town was "our own" from 7 a. m. until midnight, and Cumberland Park was taxed to its utmost capacity.

And Bender; you should have seen him, he was the handsomest in line, and the way he executed cavalry tactics on the back of his spirited (livery stable) charger was a caution.

Our color bearer, Brother Cantrell, was rather tired, but he got there just the same.

Miss Rosa Prang acted as sponsor for No. 5, and mighty well did she acquit herself.

The insignia for No. 5 was a pink and electric blue rosette with the N. B. E. W. of A., Local No. 5, stamped in letters of gold.

The weather was perfect and everything passed off as smooth as a marriage bell.

The parade attracted an immense crowd and long before the hour to move the streets along the line of march were thronged by men, women and children.

The procession moved without jar or friction at any point.

A little after 11 o'clock, the workmen, their wives and children gathered around the improvised rostrum in the center of the amphitheater to listen to the addresses. President J. F. Dunnebeck was the first to mount the stand and he delivered a splendid address. The next to speak was Jerome Jones, editor of the *Journal of Labor*. The speaker urged his hearers to be honest, upright, sober men, and to teach their children the great principles of virtue, promptness, sobriety and thorough integrity of character. Members of local unions were appealed to contend for the eight hour day, in order that they might have more time for rest and intellectual advancement.

Short addresses were delivered by Hon. A. M. Mims, president of the Farmers' and Laborers' Union, and George H. Armistead of the Commercial Club. After the speaking outdoor sports of all kinds were indulged in, while those who preferred tripping the light fantastic repaired to the dancing pavilion where a stringed orchestra discoursed sweet music.

The field sports consisted of pacing, trotting and running races, bicycle race and foot race.

Petite Miss Nellie Jones, as Goddess of Labor, was all that heart could wish, and many were the "Oh's and Ah's" indulged in by the admiring crowd as the float upon which she was enthroned came into view.

Our sponsor's crown was a base of burnished copper surmounted by three incandescent bulbs, representing the national colors, red, white and blue.

Dad Borum was as fresh at the finish as he was at the start, but it was utterly impossible to keep step with him.

Eugene Loeffler was on hand and his German accent was heard ever and anon crying Sam-handwiches, ten cents per bite.

The manner in which Cantrell carried the banner was a caution to trees and overhead wires.

The band played "The Cat Came Back," and Morrison insisted on singing it, but after a few minutes delay he was muzzled and we proceeded to proceed.

McEwen wanted to go in full dress and ride in hacks, just because another electrical worker in the shape of a ten-pound boy had arrived at his home: that is the reason he uses a shoe horn in putting on his hat.

J. C. Bender got a very severe dose of the "mystic" the other night; he was standing under an arc switchboard in the testing room at the station, which has a concrete floor, and having on a wet hat, accidentally brushed against the two poles, which promptly knocked him down and jumped on him a few. He uttered a short prayer in his own language and proceeded to cuss the weather.

The following members of No. 5 are out of work at this writing: Joe McAdams, Ed. Farewell and John O'Neil, all linemen.

The Board of Public Works and Affairs have ordered fifty-five additional street arcs, and the work of placing them will begin at once.

What's the matter with Memphis that we do not hear from her? Memphis is a good town and I can't see the whyness of this long silence.

I return thanks for both Briggs and myself for the compliment bestowed on us in your letter of recent date, and Briggs says he will write as soon as he can collect the grey matter in his cranium and bring his massive intellect to play on something electrical.

Burgess Harolde Smith interviews the alligator in the pool at the State Capitol daily, and says his alligatorship is quite communicative at times, and during their last conversation remarked that the Silver Bill would be unconditionally repealed.

In closing I would request that you send me a copy of the June Worker, as I did not receive that number.

Fraternally,
P. H. LANGDON,
Press Sec.

SEPT. 14.

"Mr. Harry Langdon, of North High street, who has charge of the electric lights in the northern portion of the city, received a severe electrical shock at the corner of Summer and Madison streets this morning, about 8:30 o'clock. Mr. Langdon had just lowered the lamp preparatory to putting in new carbons, and upon touching the wire which connects with the lamp was given a sudden shock, which threw him to the earth. Dr. R. O. Tucker was called in and prescribed for the sufferer. Later he was conveyed to his home, and at last accounts was resting easy and out of danger. The shock is supposed to have been caused by the crossing of another live wire somewhere."

The above item is taken from an evening paper. I have just returned from Brother Langdon's residence; he was resting easy but his right side is paralyzed.

ED. FAREWELL, R. S., No. 5.

CHICAGO, ILL.

SEPT. 12, 1893.

Editor Electrical Worker:

The month past has been duller than ever in Chicago. Another supply house—The Ansonia Electric Co.—is in the hands of an assignee. The telephone company has discharged many of its best men. They have been ordered by the city to take down some more of their poles and lay the wires underground. Only a little wiring is being done. The General Electric Company has secured a good contract for machines and material at the Joliet penitentiary. We understand that the State will furnish the labor and the convicts will attempt to do the job.

If it is seen that the policy of the Government of Illinois is to employ criminals to compete with electrical workers who are trying to earn money to buy food for their families, you will hear a mighty protest from the Building Trades Council of Chicago. A contractor here was heard to say that the time had come when good workmen were looking for work, and that now was the time to wipe out the union. We notice that he has no contracts on hand and that he employs no men, and that he may be wiped out of business himself. But he thinks when times are better he will make a fortune from cheap labor. Cheap men do cheap work, and even the larger companies dream of dividends from cheap electrical work. What a miserable fallacy! And by the time this contractor is able to engage workers, he will find the labor supply very shy.

This talk of breaking up the union is simply puerile effervescence. Only one source of danger exists and that is internal—trouble among ourselves and lack of interest. It is well to have faith in the officers of the union. True worth should always receive the consideration it merits. But we have seen some unions elect a man of brass for president, elevate him on a pedestal of his own conceit and then fall down and worship him as if he were pure gold. No wonder such a man is led to believe he is the master instead of the servant of the organization. Next he begins to pose as a "labor leader," and makes his living, not from work, but from the sale of his "influence." Before the latter stage, "for the good of the union," cut his head off.

No. 9 distinguished herself in the Labor Day parade. Deputy Marshal O. B. O'Neil rode at the head; behind him came the officers and the new banner; next in line was the float, which was moved by eight big black horses, and behind it stretched the column of electrical workers. The number in line was disappointing, although the members of No. 41 marched with us. The float took the prize for the best working crew in the parade. It was built upon a truck which, with the horses, was furnished free of charge by Jas. S. Kirk, the manufacturer of Kirk's American family soap. From the top of two telegraph poles the linemen were stringing telegraph and telephone wires suspended from brackets fore and aft; on the poles were two arc lamps burning. Amidships on

a carpet floor stood a United States dynamo, and behind it a switchboard which would have done credit to a metropolitan power house. On it were placed the switches for operating the arc and the incandescent lamps, with ground detector, ampere and volt-meters, automatic circuit breakers, etc. A handsome fixture with colored lights adorned the top, and each of the horses carried a flaming incandescent on his head. The switchboard was operated by one man, while another tended the dynamo. Current was supplied by twenty-eight 175 ampere hours cells furnished, charged by the American Battery Company. Their batteries are the best on the market. The remainder of the plant was kindly loaned by the Westinghouse Company. We recommend every electrical worker to use Westinghouse material and Kirk's American family soap.

L. L. JOHNSON,
Press Sec.

INDIANAPOLIS, IND.

SEPT. 10.

Local No. 10 is still in the ring. Several new applicants for admission. We turned out in a body on Labor Day with white plug hats and linen dust-ers and made a very creditable showing. With the G. A. R. encampment here and all the excitement that goes with it we had to hustle to come out even, but we did it.

The American Telephone and Telegraph Co. (Long Distance) is a few miles east of here building this way.

The hustle and bustle of the electrical business is now over here and we'll soon have men to sell. Work is at a standstill.

Brother Filter, an old comrade of St. Louis No. 1, came over during the encampment and was enjoying himself hugely when last seen.

As the time is nearing for the convention there should be something done with the apprentice question, and everyone in our vicinity wants the question brought up there and acted upon.

Fraternally yours,
D. A. GREENWOOD,
168 Davidson St.,
Indianapolis.

EVANSVILLE, IND.

SEPT. 7th, 1893.

Editor Electrical Worker:

Well, September 4th found No. 12 right in line, the boys doing credit to themselves this time, if they never did before. We had a fine turn-out, about the largest we ever had here; the boys made a fine appearance and we heard frequent comments on the route of march "what fine badges those men have got, I wonder who they are," so you see we are not altogether unnoticed when we turn out. There was not one intoxicated all day long which is a great credit to the linemen. O, they are not all hoodlums if they do get the name of it. If they all have done as well as they did here they came out on top of the heap.

Well, things are very quiet here just now; not much going on. Several of the boys got back from trips all summer. If there is any work on the outside would like to hear of it as I know some of the boys are anxious to start in again. Hoping to hear some favorable news through our next issue, I remain,

Yours fraternally,
C. H. BROWN,
Press Secretary.

BRIDGEPORT, CONN.

AUGUST 21, 1893.

Editor Electrical Worker:

No. 14 held a meeting Friday evening, Vice-president James Kilpatrick in the chair. President Laidlam being out of town. All other officers present. We initiated one candidate, using in the ceremony, paraphernalia which Brother Fagan,

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our recording secretary, secured, and which rendered the ceremony very interesting, impressive and awe inspiring, and at times very ludicrous, "to us that wasn't going through it."

The "boys" get quite enthusiastic in the course of initiations, and all of us who have "rode the goat" know what that means to the candidate. We would like to have all our out-of-town brothers witness one of our initiations; will guarantee all; will pronounce it a No. 1.

I was speaking to several brothers in regard to "posting" our "black sheep." My idea is this: to send postals to all locals with full list of scabs, each and every local to receive from and send postal cards to all other locals with their list. By this means the men "posted" will not know if they are "posted" or not, not seeing their name in the ELECTRICAL WORKER. As heretofore, all they would have to do was to read our paper; if they saw their name there they would be forearmed and give fictitious names to the locals they would run to for assistance when they got out of work or in trouble.

I would like to hear from some of our brothers in the next issue and hear what they have to say about it. All our "boys" here think it a good idea, but would like to see what the general feeling is in regard to it.

Business here is not very brisk at present. I noticed a piece in one of our local papers to the effect that the S. N. E. Tel. Co. had laid off twenty-five men. Of course, that wants to be taken with a grain of allowance. The electric light company laid one man off last week. It is a very bad time, indeed, to get work at anything in Bridgeport at the present time; thousands out of work in all trades.

Hoping to give you better tidings than these in my next, I remain,

Yours fraternally,
S. C. RIBE,
Press Secretary.

CLEVELAND.

SEPTEMBER, 6th, 1893.

Editor Electrical Worker:

Electrical news is at a premium in this city, judging from the small amount to be obtained. The one principal question being how can I hold my employment providing I am lucky enough to have any. We have a great many members out of work, and as the prospects for the future do not get any brighter, the outlook is far from promising and we will have to rely on those of our members in other cities who have a surplus; but as we have not received any answer to the last request made in the August journal we are convinced that other places are fixed similar to our own. The one great feature of the past two months has been the Labor Day parade, and our Union has taken a great deal of interest in it from the amount of drilling they have done for the event, and it may sound egotistical for me to say, but the electrical workers were given much credit for their fine appearance. All of our shops are about closed, and the telegraph companies are laying off men although it is claimed they have enough work to keep double their force going, and the street car companies are reducing wages, so it is evident the electrical workers' lot here is not a pleasant one. The proposed new electric railways that were to have been started this spring are just where they were last winter—on paper; and from present indications they are likely to remain there. So I would again warn all members against coming to Cleveland. As the date of our next National Convention is near, I would like to hear discussed some of the changes that should be made in the constitution, and if any local has any, let them mention it in the journal and then discuss it privately in the local so when they are brought up for action all will have a chance of representing their locals correctly. To introduce the subject I would like to know why the national organization does not bear more of the

expenses of the convention than it does. It is customary in all organizations with which I am connected to pay delegates for time and expenses, while the national organization pays mileage and rent of the convention hall. I do not think it more than right that the mileage should be paid by the national and would like to see the matter taken up. We are deciding on the best way of meeting the delegates, and hope by the October issue of the journal we will have adopted a plan by which we can distinguish them on sight. Yours, etc.,

N. DUFF.

DETROIT, MICH.

SEPT. 10, 1893.

Editor Electrical Worker:

Brother Geo. Harrison of No. 9, and Brother Dozier of No. 23, have been enrolled as members of No. 17, having been admitted on cards.

The Public Lighting Commissioners have awarded the contract for building the conduit system (within the half-mile circle) to Liphardt & Winterhalter, for \$17,312.50. Work was commenced early during the present month and is already well advanced.

On Thursday, Aug. 17th, while acting in the capacity of night patrolman for the Detroit Electric Light & Power Co., Brother Dominic Lane, a member of No. 9, received an electric shock from a live wire, which caused him to fall to the ground, and resulted in his death at the hospital a few hours afterwards. He was in the act of testing for an open circuit, and although wearing rubber gloves, was badly burned on the arms, and in his fall had his skull fractured, besides sustaining severe bruises. The verdict of the coroner's jury was to the effect that death was the result of an electric shock caused by defective insulation. Dennis Lane, a brother, came here and took the body to Chicago for interment.

The Public Lighting Commissioners have approved of plans for a building for our municipal lighting plant, to cost \$65,000, and hope to have work on the same commenced by Oct. 1st., or as soon as the bonds can be realized upon. The architect thinks the walls could go up this fall, and the building be finished by April. The structure is to have a frontage of 135 feet on Atwater Street; be three stories high in front and two in the rear. The first floor is to contain the repair shop, machine room and storeroom; the second, offices, and the third another storeroom. The engine room will be 50x150 feet, and the boiler room 48x150. Twenty dynamos will also require considerable space.

No. 17 made a very creditable showing in the Labor Day parade, on which occasion about 5000 trades unionists were in line, and marched to Belle Isle, where a programme of athletic sports, conducted under the direction of the Trades Council Committee, proved quite enjoyable. In the 200-yards swimming race, Brother Charles Lapworth proved himself an expert by defeating all competitors, although he started at a decided disadvantage. The electrical workers had a list of games, open to their own members only, and they were quite an interesting feature of the occasion. Brother McIntyre carried off the prizes for throwing the heavy hammer and putting the light and heavy shot, and Brother G. Brown for throwing the light hammer, while Brother J. Walker out-distanced all others in the 100-yard race, and he, with Brother G. Brown, also won the three-legged race. A tug-of-war between telephone and electric light members, was won by the former.

Brother Jas. Campan has become a benedict, having been married to Susan Mitteholtz on the 12th inst.

The fact that Brother W. J. Dawson has rented a cottage on Trumbull Avenue, near Bagg Street, would indicate that he intends, shortly, entering a similar alliance.

Rex.

PITTSBURG.

SEPTEMBER 14, 1893.

Editor Electrical Worker:

After a long silence I wish to inform you and the members of the brotherhood that Pittsburg is still in line. We have had a hard time to get the electrical workers to understand that the brotherhood has nothing to do with the old organization that formerly existed here. I think it would be a good idea for other locals to look out for Pittsburg men who come to work under their jurisdiction, and refuse to admit them until they hear from the Pittsburg Union. We will do the same with men coming from other cities. There are now a large number of Pittsburg men working in other cities who are in arrears with No. 19, as they never took out traveling cards; we will give them until the next issue of the journal to settle up. If we do not hear from them before that time we will publish their names in our next report to the journal.

Brother J. Duvall of No. 1 is working in this city, and was a welcome visitor at our last meeting.

We have also had the pleasure of having Grand President Miller with us for some time. He is doing noble work here, and No. 19 is beginning to feel the effects of his magnetic presence. He has infused new life into our Union and brought back many a wavering member to the fold.

Bro. Burns, one of our best members, has gone to Columbus to spend a few days with some of his old friends.

Brother Geo. McCarroll, better known as "Chappie," has been so busy with his big mastiff that we have missed his smiling face for the last few meetings. We also missed our old standby, Brother Harvey Hart, at our last meeting. This is something unusual for him. I understand he has sickness in his family.

Brother Ford is now quite an important man to the sightseers of the exposition, as he is watching to see that none of them come in contact with grounded wires and short circuits.

At our meetings lately we have devoted considerable time to the discussion of practical electrical subjects and all the members seem to take a deep interest in the matter.

Wishing all our brothers the best of success, I remain,

Fraternally yours,
W. J. CORDON,
Press Secretary.

WHEELING.

SEPT. 5th, 1893.

Editor Electrical Worker:

Having met with an accident to my right arm on the 19th of August, I had not intended to write anything for this issue as I would not be able to wield the pen, but in reading some papers I had picked up, I saw some articles on insulations and I thought a few extracts from them might be of some interest to the boys. Insulation we all know is the one thing we have to be the most careful of as electrical workers; the linemen on the outside of course have it easier in regards to that than the wireman or the dynamo men on the inside. The linemen have to contend principally with things in sight while the poor wiremen with things unseen.

All electrical workers of course, more or less, use appliances made from mica. Mica fills the interstices of modern progress. A few decades ago we were seeking practical use and market for the out put of mica mines already found; now we are seeking new mines to supply the great demand to which mica can be applied; thus the law of necessity changes in its relation to all things. Mica is now as essential to the various uses of electricity as this great force is necessary to human progress. In all appliances for electric lighting and power, the most important reciprocal agent entering into there mechanism is mica. All armatures are built up with this insulation, whether for dynamos, motors, generators or transformers.

Without its use as an insulation the core of the armature used for such lighting would burn out with a flash. But by placing sheets of mica between the thin sheets of iron which are secured to the shaft that runs through the drum of the armature, insulation becomes perfect.

Thus armatures of even the largest generators can be run for twenty-four continuous hours without heating them more than 80 degrees Fahrenheit above the temperature of the surrounding air. By this use of mica the lines of force are dissipated, but do not lose any of their electrical energy. In all electrical safety appliances mica also performs an important part as an insulator. To its impassable and undestructible nature much of the success of the Rheostat can be ascribed.

"The clearance of mica is so perfect that it is estimated that it can be split or divided into leaves 250,000 to an inch. Much of its commercial value depends upon this wonderful property of lamination. The largest plates of mica with such foliaceous structure are obtained from the Siberian mines, and they sometimes attain a diameter of five and seven feet. Crystals over two feet in diameter have been found in Pennsylvania; 18 to 24 inches in North Carolina. Blocks of crystal weighing over 100 pounds are frequently mined. The North Carolina mines are supposed to be very ancient.

"Mica plates found in them when first discovered were trimmed to particular shapes, and it is supposed they were used for windows, mirrors and ornaments. The number of mines and magnitude of these ancient operations excite wonder.

"Some of the mines are tunneled to a considerable length and distinctly shows marks of chisel-shaped tools. Mica varies in color from white through green, yellowish and brownish shades to black, its chemical composition is silicate of alumina and potash, with small amount of iron, magnesia and soda and about five per cent water."

In behalf of No. 21 I would say we are making all efforts possible to hold the brotherhood up in our district; we as a body are not growing much but what we have are energetic men. We are in hopes of adding quite a number of lights to our circuit in a short time, then we will make our machinery hum.

Would like to hear from all press secretaries in regards to some electrical subject in the next paper. My object in this is to create a discussion among our brothers.

Hoping to hear from all our brothers, I remain,
WILLIAM C. PRICKETT,
Press Secretary.

No. 21.

DULUTH, MINN.

SEPTEMBER 8, 1893.

Editor Electrical Worker:

This being my first attempt as press secretary, I take great pleasure in announcing that No. 25 is working along nicely and our membership is increasing every meeting since we reorganized. We have added fifteen new and bright lights to our grand circuit and are receiving applications at every meeting. We expect soon to have as large a union as the most enthusiastic union man could hope for. And before we eat our Thanksgiving turkey we shall have added to our grand circuit every light in Duluth that burns up to C. P. But, of course, like every other town, we have a few of those detestable mortals, or, in other words, measly scabs, who took to the woods on Labor Day.

The parade here on Labor Day was in every way a grand success. All the unions in the city made it a point to turn out as neatly attired and as representative of their trades as possible. Among the unions receiving the most favorable notice of the press was the electrical workers. The following extract is from the Duluth Evening Herald:

"Twenty electrical workers were the center of all eyes as they marched along, wearing grass linen coats, blue badges, soft fuzzy hats and Japanese

parasols, surmounted by electric light globes. The banner was a beauty. It bore representations of a telephone, telegraph wires, electric bells and all that. Two workers were pictured with hands clasped and the words 'National Brotherhood of Electrical Workers of America.' Local Union No. 25 was the most prominent. The boys felt gay and the brass eagle perched above the banner nearly screamed."

As Brother Megher marched along with the delegates of the trades assembly all the ladies along the line of march were heard to say "Oh, look at the pretty electrician;" and the ladies of Duluth are competent judges of beauty.

Brother Miles was all smiles at the picnic, and Brother Marks was often heard to say "Come on, boys, what are you waiting for?"

Brother Warneka was deputy sheriff on the grounds and looked every inch an officer.

Brother Hayes, as usual, had his pretty little German girl, but came late for fear he would meet some of his every-day girls; but the boys all know that his graft is coarse.

Brother Poyer, like the rest of the boys, was at the picnic and every young lady that he was introduced to said "I think he is just lovely." It was whispered around among the boys that Brother Starbird had all the girls charmed.

Brother O'Neal was a bright light in the parade—he is red headed.

Among the many attractions of the parade may be mentioned that each electrical worker wore a smile that was all wool and a yard wide.

The most successful and best conducted strike in the history of organized labor was the strike of the electric street railway employees union of Duluth against a reduction in wages. The strikers were out three days and not a wheel turned. Every line was grounded. Hawkshaw detectives and aspiring expert electricians were engaged to find the grounds and the persons who caused the grounds, and as they failed in both, the general managers sized up the situation and signed the men's proposition on the dawn of Labor Day. Of course the boys all smiled as they saw the cars all running.

Our officers are as follows: President, J. D. Hayes; vice president, Al. Starbird; recording secretary, Phil Beliveau; financial secretary, W. A. Warneka; treasurer, W. L. Seaton; inspector, Frank A. Schulte; foreman, Miller Huberd; corresponding secretary, E. J. Megher; trustees, C. C. Miles, Jr., Fred Johnson and F. A. Schulte. Delegates to the Trades and Labor Assembly, Hayes, Meagher and Warneka.

Fraternally yours,
F. A. SCHULTE,
Pres. Sec.

WASHINGTON.

SEPT. 11, 1893.

Editor Electrical Worker:

With this issue I beg leave to announce that on Monday, Sept. 4th, 1893, Electrical Union No 26 gave its first grand excursion to Marshall Hall, and won for itself a name that will go down to the ages to come as being one of the most orderly parties that ever landed at Marshall Hall, and for once in the history of the labor unions it proved that a labor union could give an excursion without the members being full of liquor. The day was spent by the members and their families and friends on the green lawns. At 4 P. M., the footrace was run for a silver medal. The entries were Mr. W. Harry Ward, Mr. Josie, L. Leach and Brother Jno. M. Berger. The race was a 100 yard dash and was won by Mr. Harry Ward, Mr. Josie in second place and Brother Jno. M. Berger in third place. At 4:30 the bicycle races were run as follows:

First race, one mile, open.

First prize, silver cup, valued at \$25.00. Donated by Electrical Worker Union No. 26.

Second prize, gold L. A. W. badge, valued at \$6.00. Donated by F. S. Cahill & Co., 1711 Pennsylvania avenue.

Third prize, bicycle clock, valued at \$4.00. Donated by District Cycle Company, 1424 and 1426 Pennsylvania avenue.

The first prize in first race was won by Mr. William T. Robinson.

Second prize, won by Mr. Howard A. Rhine.

Third prize, won by Mr. W. Harry Ward. Time 2:52 1-5.

The second race, two miles, open.

The prizes and by whom donated are as follows:

First prize, the goldsmith cup, valued at \$14.00. Donated by M. Goldsmith & Son, 911 Pennsylvania avenue.

Second prize, silver medal, valued at \$4.00. Donated by Electrical Worker's Union No. 26.

Third prize, bicycle bell, valued at \$2.00. Donated by C. Schneider, 1207 F. St., Nw.

The first prize in the second race was won by Mr. Wm. T. Robinson.

The second prize was won by Mr. Howard A. Rhine.

The third prize, was not ridden to a finish Mr. Ward, having made 7 laps, and Mr. Proctor having made 6 laps, and there being 8 laps to the two miles, no one was awarded the third prize, but Electrical Worker No. 26 presented Mr. Ward with it. Time 6 1-4 minutes.

The third race, 1/2 mile open, to electrical workers of Union No. 26.

The prizes and by whom donated were as follows:

First prize, silver medal, value \$4.00. Donated by Electrical Worker Union No. 26.

Second prize, bicycle lamp, latest style, value \$4.00. Donated by the Overman Wheel Company, 715 13th street, Nw.

Third prize, bicycle lamp, value at \$4.00. Donated by Mr. W. Harry Ward, manager Eagle Cycle Company, 1010 Pennsylvania avenue.

After the entries had been closed, and on the day of the race, Brother Sam Ulman, entered there being no objections to his riding.

The first prize was won by Brother Sam Ulman.

The second prize was won by Brother Jno. M. Berger.

The Third prize was won by Brother J. C. White. Brother Jos. Collins not riding on account of not being on the ground in time. Time 1:38.

The above races were all held under the sanction of the L. A. W. There being some parties who desired to enter on the day of the race, and they could do so under the L. A. W. rules if there were no objections, out of the four riders entered in the first two races there was but one objected to Mr. Hunter entering, and therefore Mr. Hunter and the rest were barred out according to the rules of the L. A. W.

At 6:30 P. M. the sack race was run with the following entries: Brother Jos. Collins, Mr. Harry Ward and Mr. L. Leach.

The race was won by Mr. Ward; Brother Collins falling down let his hands touch the ground and therefore was barred out of the prize; he was over three feet in advance of Mr. Ward when he fell. Sorry that Brother Collins did not win, but he will do better next time.

Brother Berger gave as his reading Spartacus to the Gladiators, and after he was through, Brother Bob Metzel, the ex-president of L. U. No. 26, stepped forward and presented Brother Jno. M. Berger with a silver medal for his services, after which the presentation of prizes to the winners in the races was made by Brothers Jno. M. Berger, chairman of the committee on athletic sports and games; Geo. A. Malone, assistant chairman and Brother Metzel, chairman of the ticket committee. The Union presented its president, Brother Albert Man, with a bicycle lamp.

Mr. Ward did some very wonderful feats in his fancy riding; when he had finished and was about to retire from the floor of pavillion, Brother J. M. Berger, on behalf of Local Union No. 26, presented him with a silver medal for his services on the excursion.

At 10:30 the captain of the steamer blew the whistle and the members and their friends came aboard well pleased with the day's outing.

I desire to state that the last part of the article appearing over my name in the WORKER for the month of August (in regards to Jno. B. Galloway, and James B. Lambice) was done without my knowledge or consent, and I hope that in the future there will be nothing appearing over my name unless it is over my signature and with my consent.

Mr. Gault, feed dealer, corner of 1st and Indiana avenue, kindly loaned the sacks for the foot races. The Local Union No. 26 extends its thanks to the firms that so kindly donated such valuable prizes for the bicycle races. The Union extends its thanks to Brother Metzel, chairman of the ticket committee, for his untiring zeal in trying to make the excursion a success. Also to Brother Malone, the assistant chairman of the committee on athletic sports and games, who did all in his power to secure what ever was necessary to make the games and sports a success and please the people on the excursion. According to the ideas of some of our kickers, who did very little but sell tickets, they are commencing to find fault with some of the committees because they had no voice in the business as transacted by the committees, and are trying to create dissension among the members against the committees. Had they stood some of the blunt of hard work they would have no cause to kick. The committees did the best they could to make the excursion a success, and in my humble judgment they did all that could be done. From the present outlook the excursion has been a success in more ways than one. I will say this to the kickers: That had it not been for five or six of the committees Electrical Union No. 26's excursion would have been a grand failure and 26 would have been a thing of the past. But the brothers can rest assured that no matter what may come the big seven will stick to N. B. E. W. and hold 26 in the line

Yours, in N. B. E. W.,

JNO. M. BERGER,
Press Secretary, L. U. 26.

No. 805 M st. N. A.

PHILADELPHIA.

SEPT. 3, 1893.

Editor Electrical Worker:

Well, our excursion is over, and No. 28 is wiser, if not richer. Financially the excursion was not as much of a success as we had hoped it would be, but otherwise the trip was a success. The lack of interest taken by the members was something awful. I was told that there wasn't more than fifteen of the members on board. Being one of the missing ones, I suppose I will have to offer an excuse. I expected to go on the trip up to a few days before the date, but business of more importance took me out of the city, so I had to let one or the other go by the board.

The boys report a fine time, good music and plenty of it, nice weather, etc., but I think No. 28 is done with river excursions.

Electrical work in Philadelphia is horridly depressed at present. Most of the companies using men are at a standstill, that is, they are not putting on any new men, and the "lay off" of a few weeks ago has overstocked the market. The trolley work that one can read so much about in the daily papers is not doing the fraternity very much good. The feeders are all in underground conduits and the overhead wires are being put up by, well, what will I call them? "Would-bes," I guess. We haven't more than half a dozen union men working on the trolley work in the city. But "where there is life there is hope," and we are looking forward to a good winter for the boys.

At our last meeting we had the pleasure of a visit from three outside brothers. I did not catch the names of two of the brothers, but the third one was none other than the pleasant ex-Press Secretary from 26, Brother W. W. Gilbert. Unluckily for us, the visitors dropped in on us on one of our off nights. The attendance was slim and poor order

was maintained. The President is too easy with the boys, and they are fast taking advantage of him; and instead of the quiet, business-like meetings that we used to have, it is almost impossible to hear a speaker across the room. A change will have to be made one way or the other soon, or we won't be able to get a quorum together. Perhaps a change of administration will help us.

The injury that Brother M. Griffin received by falling out of a tree some time ago has proved more serious than was first reported. One day last week he was taken to one of the hospitals and his foot taken off at the ankle. Brother Griffin has the sympathy of the entire Local, and I have heard the boys are going to show it in a substantial manner.

The Local was in receipt of several communications from headquarters and at our last meeting we disposed of them. A motion was carried, after quite a long debate, to comply with the G. S. T. request for prompt action in the matter of the 25c.

Hoping to have a more favorable report next time, I will open the circuit for a month.

Fraternally yours,

J. W. FITZPATRICK,
Press Secretary.

NEWARK, N. J.

SEPT. 5th, 1893.

Editor Electrical Worker:

Yesterday's Labor Day celebration was one which will not be forgotten for a good many months to come, as it was a success in every respect.

Long before the time for starting came, the streets were filled with an enthusiastic assemblage, all anxiously waiting for starting time.

Grand Marshal Henry A. Beckmeyer, of the Electrical Workers' Union No. 33, arrived at headquarters shortly after 11 o'clock, and in a very short time had all the boys in line and in their proper places.

Union No. 33 received the honor of being placed in the first division, and somewhat in the following order:

Trucks exhibiting electrical appliances, including a 15-foot pole fitted with cross-arms, boom and city lamps complete, with electric light linemen at work; electric bells, batteries, etc., in operation. President Walter J. Curtiss rode on Bro. Stiff's horse (and the horse never kicked or said a word). Next in line came Bro. George Kern, carrying the Union's banner, which was pronounced the handsomest one in line.

A novel feature of the parade was the way the inside wiremen turned out, with Bro. James Bates in the lead. Each man wore on his coat front a colored incandescent lamp, and was ornamented with a large bouquet of flowers and a cane.

The electric light and telephone linemen were praised by every one on their good appearance and fine marching while in the parade, and received a number of ovations while on the way to the park.

Dancing, ball playing and athletic games were indulged in very freely in the afternoon while at the park, and in which many of the electrical workers took an interesting part, capturing a number of prizes. Part of the programme consisted of a 440-yard dash, in which Bro. Lewis came in first, followed by Bro. Smith, a close second. Fat men's race, "for electric light and telephone men only"—Bro. Curtiss first, Bro. Kern second. Running jump—Bro. Lewis, 14 feet; Bro. Kelly, 13 feet 7 inches; Bro. Flaherty, 13 feet 5 inches. High kick—Bro. Smith, 8 feet; the rest were "not in it." Bro. James Bates acted as referee, and gave a popular decision in every case.

Bro. Curtiss amused the crowd with a song and dance act, while Bro. Whitehouse distinguished himself by getting off some of his latest jokes and comic sayings "while the policeman was not around."

Bro. Workman got away with several sausage sandwiches, and as he has been barking ever since, grave fears are entertained that the dog might have been mad.

As a whole, all the boys enjoyed themselves "way up," and will now quiet down until we have our next ball.

Hoping to see all locals represented in our September number, I remain, as usual,

WM. E. ROSSETER.

Pres. Sec'y.

BROOKLYN.

SEPT. 2, 1893.

Editor Electrical Worker:

Our correspondence has been somewhat neglected, owing to our negligence in electing a Press Secretary, but you may expect to hear from us oftener in the future.

We are getting nicely over the troubles caused by our strike this summer, and for the benefit of the brothers who may be interested would say that we now have a minimum scale of three dollars per day. Some of the companies refused our request for a matter of seven weeks, but in the end the settlement was perfectly satisfactory to both sides. We owe thanks to our sister Locals for keeping men away at the time.

There have been comparatively few accidents here, considering the amount of dangerous wires we have to contend with. Brother McConnell was killed by falling from a trolley pole, and two or three other brothers have been more or less severely burned.

There has been a good deal of work here this summer and it has attracted a good many men from other cities, but it is getting pretty well finished up, and though we would be pleased to see any of the brothers, I would say that the chances for work are extremely small and growing smaller.

The employees of the Brooklyn City Railroad are to give a picnic at Coney Island on the 9th instant. There are to be athletic games on the programme, such as pole-climbing and hand-line throwing. I expect to hear of all the records being lowered by some of Brooklyn City's expert linemen.

Yours fraternally,

TED WHITE,
Ex-Recording Secretary.

BOSTON, MASS.

AUG. 29th, 1893.

Editor Electrical Worker:

As I start on my vacation the 30th, I think I had better write a few lines for the WORKER.

In my last I said that No. 35 was going to turn out on Labor Day, but that is all over now. At the last meeting they voted not to turn out. I am very sorry for it, for I think it would have helped the union a great deal. It would have shown the people how strong we were, and would have been the means of getting more members into our local. One reason why they changed the vote was, that the members did not show much interest in it, and another is, that a good many of our boys are out on the road at work. T. Roach's reason is, that, since my last letter there has come to his house a new lineman—10 lbs. he tells me—and that he has got good lungs. He says it is great to be a dad.

Since my last letter the Union has taken in fifteen new members.

One thing I wish that all our members would do, is to see that their dues are all paid up, so that if they were sick or disabled they would be entitled to their benefits. We have several brothers laid up just now who do not get their benefits because they did not pay up.

Brother C. Dunn is still in the hospital; his family get his benefits, and it is a great help to them.

Brother W. Murphy was hurt quite badly on the 22d inst. He fell from a pole in Malden, and will be laid up for some time.

Brother Dan Puxbey was at work in Concord, N. H., running a cable, and it got down on the trolley and gave him a bad burn, and when they cleared the trolley he fell to the ground, a distance of twenty-five feet, and fractured his skull, and at the present time it looks bad for him. We all hope for the best.

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Brother John Horton has the sympathy of the union in the sad bereavement which came to him in the death of his father, Samuel J. Horton, which occurred on the 25th inst. Although not a member of the Union, almost every one knew him, for he has been a lineman a good many years. He was buried Sunday from the St. Vincent Church, South Boston, and was followed to the grave by his fellow-workmen in the Fire Alarm Department, where he had worked for nearly three years; also by members of the Owl Club, Knights of Honor, G. A. R., Red Men and Kearsarge Association, all of which he was a member. He was a kind husband and loving father, a good companion and will be missed a great deal.

The Building Trades Council ordered a strike on the Bijou Theatre, and called three of our men out and they are still out. How long it will last I don't know.

I think that most of the boys are at work now. All of the companies are doing a good deal of work at present.

I think if every brother would read the second editorial in the August number and profit by it, it would be a good thing for him and for the Union also. We have had some of the trouble in our own local officers, but now I think we have got a good set, and when it gets a little cooler I think we will begin to hustle. Yours fraternally,

W. H. B.,
Press Secretary.

NEW YORK.

SEPT. 2, 1893.

Editor Electrical Worker:

DEAR SIR: I am pleased to state that our picnic was a grand success, and all the boys of No. 36, with their sweethearts and wives, say it will not be our last; and it was a grand sight to see Foreman McMahon and Brother Tammany doing the Oxford Minuet, not forgetting Brothers Lewis and Post, who are hustlers. No. 3 came 100 strong, but we missed Grand Vice President Healy, but were pleased to see him at our last meeting and saw new lights added to our circuit. Brother Haviland had the pleasure of visiting No. 26 last week, and he speaks very highly of their hospitality. I was pleased to receive a letter from G. P. Miller from Allegheny, Pa., in the land of the living yet. I must state that No. 13 is not very punctual in answering correspondence, but I suppose they will blame the unlucky 13. Brother Fritz of No. 28 has got the boys down fine. I am sorry to say that our Treasurer, J. F. Casey, got his knee hurt last week, and to think that Jim is so careful about getting his leg pulled. Poor Jim! Never mind, Jim; our modest President will see you through if our Financial Secretary, Casey, will stop smoking clay pipes; and I will have a dumb-waiter put in for Brother McMahon. Excuse me, Mr. Editor. You will hear from No. 36 in another way soon.

A. T. McCABE,
Press Secretary.

SYRACUSE.

SEPTEMBER 4, 1893.

Editor Electrical Worker:

It is with pleasure, that I am placed, so I can say something for No. 43. We had quite a lively time at our last meeting discussing matters pertaining to our local.

The manager of the Electrical Light Company boasted that he would break up our Union, but we think he will get left.

Brother Spurgeon Johnson has returned from Denver, Col., and he reports that Brother Johnnie Bennett, who went there for his health, is not improving as much as we hoped for.

Hoping there will be something more interesting next month, I am

CHAS. BRAND,
Press Secretary.

ROCHESTER.

SEPT. 4, 1893.

Editor Electrical Worker:

Well, here we are again trying to think of something that would be of interest to the boys. We had our picnic Saturday, August 26, at Windsor Beach and to say it was a grand success would be putting it mild. It was a great affair. Everything went off smoothly and it went far to convince the public that although the electrical workers have a hard name they are not as black as they are painted. A more orderly lot of men never got together than those at Windsor Beach. The business men contributed lots of prizes to be competed for and our boys never forget their friends. So much for our first picnic.

The last issue of the ELECTRICAL WORKER was a dandy. I was pleased to note the rapid growth of our grand brotherhood and to see we now reach from ocean to ocean. Keep up the good work. I notice several complaints from locals in regard to strikes and other matters. Now let us be reasonable. We cannot expect to get all the news from the ELECTRICAL WORKER. There is lots of news we can get from the daily papers.

The Electrical Brotherhood will, in time, overcome lots of obstacles that are in our way, but it will take time and we must wait patiently. Now, I am not much of a kicker and I never kick without cause, so now look out for me.

Why do not the secretaries of some locals pay more attention to business? I sent \$2 to one secretary about a month ago for a card for one of our craft, and up to date I have received no reply to it. I prefer not to mention the local at this writing, but we should pay close attention to these matters, for when a man pays for his card he wants it. It is a pleasure to do business on business principles, and I congratulate No. 16 (Cleveland) on their prompt manner of doing things and would respectfully suggest that other secretaries follow No. 16's example. We had a regular western blizzard here last week. It blew an awful gale; lots of wires down; lots of work for a few days. We have not yet felt the hard times to any great extent and there are only a few out of work and I hope to see them all employed very soon.

Brother Pete Martin buried his little boy since I wrote last. Hard luck, Peter, but God's will be done.

Union 44 is progressing nicely. We are taking in new members every meeting and some of the larger cities will have to look to their laurels or we will pass them before long. Keep your eyes on this little inland city and you will find us in the swim. We had a visit from Bro. McGinty (the only original McGinty) of New York City, who has been visiting his brother here.

For fear of the waste basket, I will close with best wishes to all. I am,

Fraternally,
HARRY SHERMAN,
Press Secy. No. 44.

SEDALIA.

SEPT. 8th, 1893.

Editor Electrical Worker:

Well again there is nothing but hard times to complain of here. Almost no work of any kind now. The M. K & T. Railway is making preparations to string two lines from here to St. Louis over their new line. The work will probably be commenced about October 1st. That is all the work there is in sight at present. All linemen employed by the Missouri Pacific Railway, have been notified of a five per cent reduction in their salaries without any promise of restoring the former wages. We held a special meeting last Sunday morning for the purpose of initiating Mr. E. E. Crews.

Quite a number of traveling brothers have passed through the city during the past month. Mr. Frank Baker and two partners passed through here Tuesday. They left a hotel bill unpaid having told the hotel keeper that they were linemen

employed by Mr. J. H. Baker, of the Missouri Pacific, and would stay several days. Some of the brothers say that Baker exhibited a traveling card, but did not notice from what Union. The N. B. E. W. was not represented here on labor day there being only about five members in town. Well lets ring off.

Fraternally yours,
C. E. JACKSON.

No. 48.

BIRMINGHAM, ALA.

Editor Electrical Worker:

Union No. 50 returns thanks to No. 29 of Atlanta and wishes her success in her union work. Also congratulations to Brother Hardy. Brother Studman was married August 22 and gave the brothers a good time.

Brother Batty has just returned from a visit to Galveston and received a hearty welcome. Electrical business very dull here. M. V. MOORE,
Press Secretary.

SCRANTON, PA.

SEPTEMBER, 7th, 1893.

Editor Electrical Worker:

Being desirous of letting the electrical workers throughout the country know that 51 is alive and working hard for the cause of the Union, I make this feeble attempt to represent my fellow workmen in the "Electrical Journal;" hoping that any mistakes or blunders on my part in the future, will be taken and looked upon in a brotherly light as I intend to write with a clear conscience and misrepresent nothing.

While the outlook at the present is not favorable for linemen in this locality, all the members of 51 are working; though quite a few of them employed by the "Scranton Traction Company" were laid off a few days ago, but they got work from some of the other companies so that none of our members are hard up as yet.

We are adding three and four additional lights to our grand circuit at each meeting, and expect to have all electrical workers in the city having their shoulders to the wheel ere snow flies.

The journal is a great favorite with members and they anxiously await the 25th of each month as they expect it by that time; then, if any one of them fail to get it look out; first the blame is placed on the officers of the Union, then on the editor and lastly on Uncle Sam; by that time they have eased their minds and are satisfied until the next month arrives and with it comes the journal.

Brothers, do not be hasty in finding fault with your officers or with the editor. A good many of you perhaps was initiated at your last regular meeting and could not or was not entitled to receive a journal. Then, again, you must remember that the officers of a local union have some work to attend to in making out reports, corresponding and so forth, which takes up a great deal of time, and, perhaps, when you are enjoying yourself at a ball or picnic, your officers are huddled together straightening out books and making up accounts.

For fear of going to the waste basket I had better open the circuit. Yours with brotherly love,

J. O'LAUGHLIN,
Press Secretary.

PEORIA, ILL.

SEPTEMBER 7, 1893.

Editor Electrical Worker:

After some delay in getting news, I will make my first attempt as Press Secretary. Labor Day has come and gone, and No. 54 has left an impression which will not soon fade from the memories of Peoria people. We turned out in fine shape. We had fifty marching and twenty on the floats. Those marching carried striped umbrellas with incandescent lamps on the tops of them. And the new badges did much toward the display. The lodge

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had a novel exhibition in the shape of a pole with cross arms, cable box, telephones, etc., on a wagon, the whole thing decorated in an elaborate manner. There were also good displays made by the Peoria General Electric Company and most of the supply houses. We took the people by surprise with our novelty of design, and the newspapers wrote us up as being the finest body in the parade, which we consider quite an honor when we compare our age with others who took part in the parade, and if we continue to flourish as we have in the past the next time we turn out we shall discount them all, hands down. Concerning our meeting, I am sorry to state that the boys don't seem to be as proficient as they should be; but I hope and believe that we will soon have everything working smoothly. Brother Overall's reports are very encouraging. Our regular meetings are held on the first and third Wednesdays of each month. There is not much work here for electrical workers, and most of the companies are letting men go. We are contemplating renting a hall for the use of the lodge members only, where we can go any time and read, etc., to pass the time. So, when a member is not working he can find a place to stay. And then we will entertain in first-class order any visiting member, and they shall always be welcome to the rooms of No. 54. Although the boys will expect to see a large report from me I think they will be disappointed at this. As I have no more of note, I remain

Yours fraternally,

N. J. CUNNINGHAM,
Press Secretary.

DES MOINES, IA.

SEPT. 11, '93.

Editor Electrical Worker:

Well, as the boys expect to see something in the next paper from No. 55, I think I had better go to work or I may get "grounded."

We can brag on the progress of No. 55 as they are all doing fine. Every meeting we have two or three to put through.

But of course there is always a ground on every circuit. I must say I was not very well pleased with the number of lamps that burned on last Thursday, our regular meeting night. There was a very poor attendance. Pompeii was here two weeks, so I think the boys could go there one of the other nights. So don't forget, boys, that we want every one of you at the meeting every night.

I am glad to state that Charles Archer of No. 9 has deposited his card with us. Chas. is an old Des Moines boy and we are glad to have him back and hope he will get work.

James Kane of No. 18 was with us several days. We were glad to meet him as he is one of the oldest men on the line. He had a great many old stories to tell that were very interesting.

There is one more thing I would like to speak about. That is about a union man. A brother is a brother until there is something against him that can be brought into the union and he is expelled. Just because you don't like a brother, that is no reason that you should try to work him out of a job and otherwise hurt him.

A fight among brothers is the worst thing that can happen. Others will think that if you don't stick up for one another what is the use of forming it.

We have all the best men, or at least their promise, which goes a long ways.

There are yet a few that we would like to have, but still there are some we do not care anything about. One of them is a fireman here who runs high-tension arc lines concealed. That man, if he is not a scab, he would be if he had a chance because he says he will not support a union. You all know him.

With best wishes for the success of the brotherhood I will close.

Fraternally,

L. M. SIMPSON,
Pres. Sec.

SALT LAKE CITY, UTAH.

SEPT. 5, 1893.

Editor Electrical Worker:

No. 57 is quietly plodding along in the even tenor of her ways, neither turning to the right nor to the left, the scarcity of work being the only howl the boys have.

A split has occurred in the Federated Trades over some grievance of the stone-cutters' and pavers' union. All the building trades have withdrawn and organized under the head of the Building Trades Congress, the other trades remaining with the Federated Trades. We have not as yet affiliated with either, pending a decision from our committee as to which would be the proper organization to join.

Labor Day was celebrated by both the Federated Trades and Building Trades Congress. The latter turned out in a very fair-sized parade, and gave an excursion to Saltair Beach. The former gave an excursion to Garfield Beach. Both excursions were very well attended. The day was not generally observed.

The telephone and electric light companies show their appreciation of scab labor by keeping the scabs on steady and laying off the union men these hard times. They will doubtless, ere long, see the error of their ways.

We are sorry to inform the members of the "B" that so soon in our young existence we placed in the grand circuit a lamp with a broken filament, in the person of E. W. Ross, with many aliases, who, when we organized, was elected to the office of financial secretary. We placed several dollars in his hands to send to St. Louis for lodge supplies. The church bells have rung out their melodious peals for the past eight Sabbaths, the tide of the Great Salt Lake ebbs and flows with its wonted regularity, but no tidings of the money that was intended to reimburse the G. L. and increase the clearance-house reports of St. Louis has been received, but in all probability it was used in aiding the absconder in crossing the western range and to the land of the rising sun, where he may possibly attempt to limp into the hospitalities of some unsuspecting unions. We take this means to inform the Brotherhood as to his character, and to be on the watch for him. The description of this man, devoid of principle and destitute of honor, who depleted the treasury of Salt Lake Union No. 57, is as follows: Height, about 5 feet 10 inches; weighs about 175 pounds; light complexioned, blue eyes, heavy sandy moustache; walks with a limp, on account of one leg being shorter than the other, but not as short as he is himself in his accounts with No. 57.

News, like work, is very scarce, and I will have to close for this time.

Yours frat.,

CHAS. C. CADY,
Continental Hotel.

SAN ANTONIO, TEX.

SEPT., 11th, 1893.

Editor Electrical Worker:

Labor Day was quite extensively celebrated in this city, the celebration being participated in by all the labor unions represented in the "Trades' Council." No. "60" was in it with a vim, all the boys turning out in their best, each vying with each other, all looking as handsome as a "summer girl" at the seaside.

An important feature of the parade was the presence of three troops of the Third Cavalry from Fort Sam Houston, led by the famous Twenty-third Infantry Band. The fire department was out in full force and added much by their presence.

The Honorable Mayor and City Council and other prominent and distinguished citizens in carriages took part in the procession, as guests of the "Trades' Council," among them the genial and whole-souled friend of No. 60, Mr. P. E. O'Hara of the City Electric Company.

After the parade the great majority hied themselves away to San Pedro Springs, where the fes-

tivities of the day were to be held. Our boys, instead of breaking ranks, marched to the hall, Mr. O'Hara marching with us, wearing one of our handsome new badges, of which he was very proud. After breaking ranks a surprise was in store for us; the tables were turned and we were the guests of Mr. O'Hara. Having spent a pleasant hour in partaking of refreshments provided by our genial host, during which time the following toasts were proposed and appropriately responded to, viz.: "The Success of the City Electric Company" and "The Prosperity of L. U. No. 60, N. B. E. W. of A." We wended our way to the San Pedro Springs, San Antonio's favorite resort, where the large crowds were entertained by a brilliant, instructive and interesting speech by our eloquent mayor, the Hon. Geo. Paschal, as well as other noted speakers, all discoursing upon the issues of the day as affecting labor. Among the speakers was Mr. Theo. H. Banks, who, while a leading contractor of this city, is a very staunch and ardent friend of union labor.

After the speaking the time was taken up with select music furnished by the ex-Firemen's Band, and numerous interesting sports. At night the spacious ballroom was filled with merry dancers.

There has been an abundance of work going on in this locality during the summer, the City Electric Company having lately completed the work of lighting by electricity the Grand Opera House, using all the latest appliances, including safety devices, automatic switches and combination fixtures. Also many other large jobs, including the residences of Mayor Paschal, George B. Moore, the millionaire lumber man, Messrs. M. and S. Halff, the mammoth wholesale and retail dry goods merchants of this city, and the palatial residence of Banker George W. Littlefield of Austin. This company, of which Mr. P. E. O'Hara is at the head, employs five of our members, running the only first-class union shop in the city.

The San Antonio Gas and Electric Light Company, the largest lighting plant in the State, with a capacity of 500 arcs and 6500 incandescents, are running one 48 horse power and one 125 horse-power generators, furnishing power for two street railways and the San Antonio Water Company, respectively, besides motor and fan circuits over the city. They employ a large force and prefer union men. Our worthy president, Bro. J. F. Wellage, has charge of the line work for this company.

The Southwestern Telephone and Telegraph Company have been overhauling and rebuilding their lines, cutting everything straight. Bro. J. J. Trahin, our financial scribe, is foreman for this company, and has been very busy with a gang of men solving Chinese puzzles which have been accumulating for years. Bro. Frank Butcher, No. 60's faithful inspector, who is city lineman, has been getting the fire alarm wires on the top arms. He now has them in good shape.

Mr. S. P. Wreford, a contractor of Brownsville, is constructing for the United States Government, a military telegraph line from Forts McIntosh to Ringgold, a distance of 112 miles, along the Rio Grande on the Texas frontier.

Owing to the stringency of the money market and general dull times the indications are that there will be but little doing in our line for some time. Just now a few of our members are out of employment, and while they have good prospects of returning to work soon, there are more men in this city and vicinity than there are jobs.

Mr. J. F. Marshall, chief operator for the Western Union Telegraph Company in this city, and other old-time telegraphers remember our grand president, Bro. Henry Miller, at the time he was employed by the United States Government in the construction of the military line to Fort Clark, and are pleased to know of his success in life. Fredricksburg, our grand president's birthplace, being only a few miles distant from San Antonio. L. U. No. 60 feels more than a passing interest in Bro. Miller, and we hope it may be his intention some time in the near future to pay his old home a visit,

in which case we would be highly honored in receiving and entertaining him as our guest during the time he might wish to spend in our city.

Our members have hitherto shown great interest in the work of the union, and we trust this interest will grow as time passes. Keep this up, brothers, and we will make No. 60 the banner union of the Southwest. We hope in the near future to be able to establish an electrical library here, in order to get the boys together, thereby furnishing intellectual amusement that will attract them to the meetings.

One of the chief benefits so far derived from our union has been to bring the boys employed by the different companies together, and to do away with the petty jealousies heretofore existing between them. It is found by all that their interests are identical, and what benefits one is good for all, so that there is no longer that bitter or indifferent feeling separating telephone men from electric light employes, or others of like craft.

Another characteristic influence born of our organization is the earnest desire for the elevation of our members to a higher plane of usefulness, and the production of a better class of labor, brought about by the interchange of ideas among us, which will not only benefit us, but also our employers, who are alike interested, giving them better service and more value for the wages paid us.

Yours fraternally,

J. H. MALONEY,
Acting Press Secretary.

ST. LOUIS.

SEPT. 15, 1893.

Editor Electrical Worker:

As I believe No. 64 is the baby union of the brotherhood, it behooves the Press Secretary to be rather modest when he makes his initial bow, and as we cannot blow our horn about what we have done, and it would be considered egotistical to say too much about what we intend to do, our communication must necessarily be short.

No. 64 was organized exclusively by inside wire men, and as we expect that all inside men in No. 1 will eventually get transferred to our union we will have quite a respectable number of members. At present there are about 100 inside men in the city, and as the business is constantly growing, the number of inside men will naturally increase with it. The question may be asked why we organized in a separate union. A number of reasons can be given. 1st. The inside men work only eight hours, while linemen work ten hours. 2nd. The scale of wages is different. 3rd. The linemen outnumber the wiremen in No. 1 to such an extent that inside men felt that they had little show there, and this deterred a great many from joining, and also caused a number of those who were members to take very little interest in the meetings. 4th. As it is high time that we should have a regular apprenticeship system and classification of men, we felt that this would be impossible in a mixed union. 5th. It was an injustice to the linemen to be taxed to support a building trades council from which they can receive no benefit, for the sake of a comparative few inside men.

With a good building trades council to back them, and the example of No. 1 to emulate, the members of No. 64 can congratulate themselves that it is in the latter part of '93 that they launch their bark and not in '90, and should have smooth sailing. But storms will arise, many disheartening events will occur before our ideal will be realized. Now that the die is cast, the Rubicon crossed, we should make a firm resolve never to desist from our cause until every desirable inside wireman in St. Louis is numbered within our fold, and our ideal realized.

C. E.
R.

CAPE MAY, N. J.—The Cape May Trolley Line is to be extended and a double track laid along the beach.

DIRECTORY OF LOCAL UNIONS.



(Secretaries will please furnish the necessary information to make this directory complete. Note that the time and place of meeting, the name of the President, the names and address of the Recording and Financial Secretaries are required.)

No. 1, St. Louis, Mo.—Meets every Tuesday evening at 305½ Olive st. John Hissrich, Pres.; M. L. Purkey, R. S., 706 Pine st.; W. G. Frey, F. S., 1110 N. High st.

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No. 32, Paterson, N. J.—Meets first and third Monday at German Union Hall. E. J. Clancy, Pres.; Jas. Maher, R. S., 348 Grand st.; Ray Clark, F. S., 409 Paulison ave., Passaic, N. J.

No. 33, Newark, N. J.—Meets every Monday evening at No. 58 Williams st. Walter J. Curtis, Pres.; J. S. Stiff, F. S., 38 Elm st.; W. Whitehouse, R. S., 117 Quitman st.

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No. 36, New York, N. Y.—Meets first and third Thursday at Ledwith Hall, Forty-fifth st. and Third ave.; T. P. Ruane, Pres.; Alex. T. McCabe, R. S., 13 Morton st.; J. P. Casey, F. S., 83 E. 113 st.

No. 37, Hartford, Conn.—Meets first and last Friday of each month at Central Union Labor Hall, 11 Central Row. Morris Cavanaugh, Pres.; J. T. Neville, 391 Allen st., R. S.; C. E. Byrne, F. S., 16 John st.

No. 38, Albany, N. Y.—Meets the 1st and 3rd Thursday of each month. M. J. Celler, Pres.; John M. Wiltse, R. S., 260½ Livingston ave.; Owen Dooney, F. S., 4 Rensselaer st., Troy, N. Y.

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No. 61, Los Angeles, Cal.—C. P. Lofthouse, Pres.; F. E. Peters, R. S., 237 E. 4th st.; Geo. McClure, F. S., 1417 Pleasant av.

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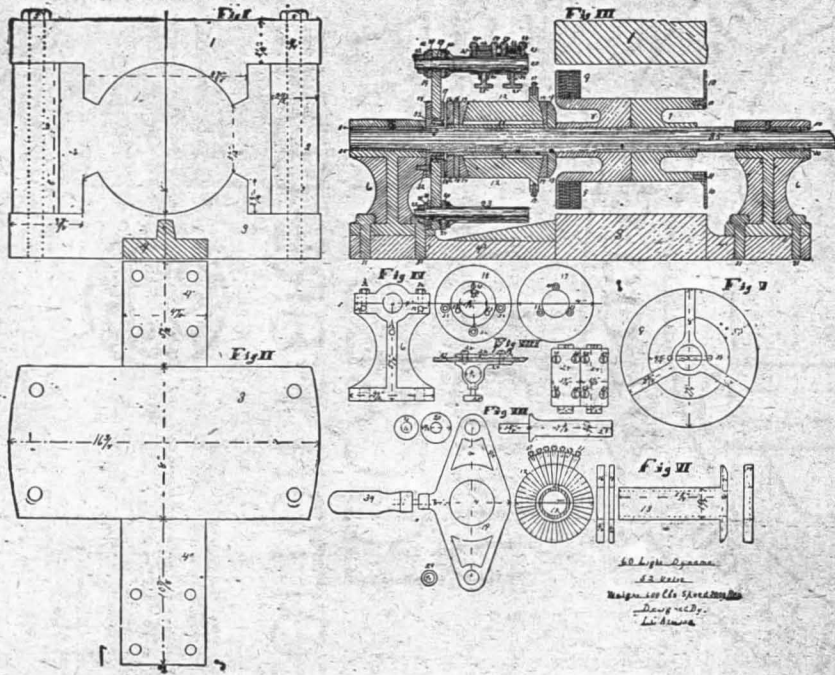
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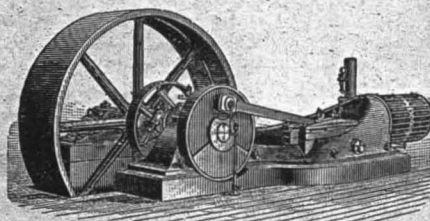
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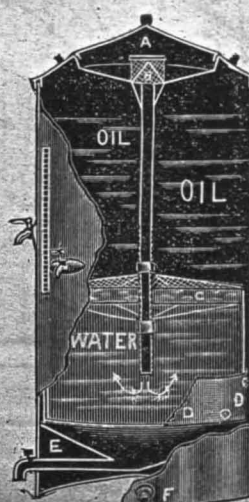
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